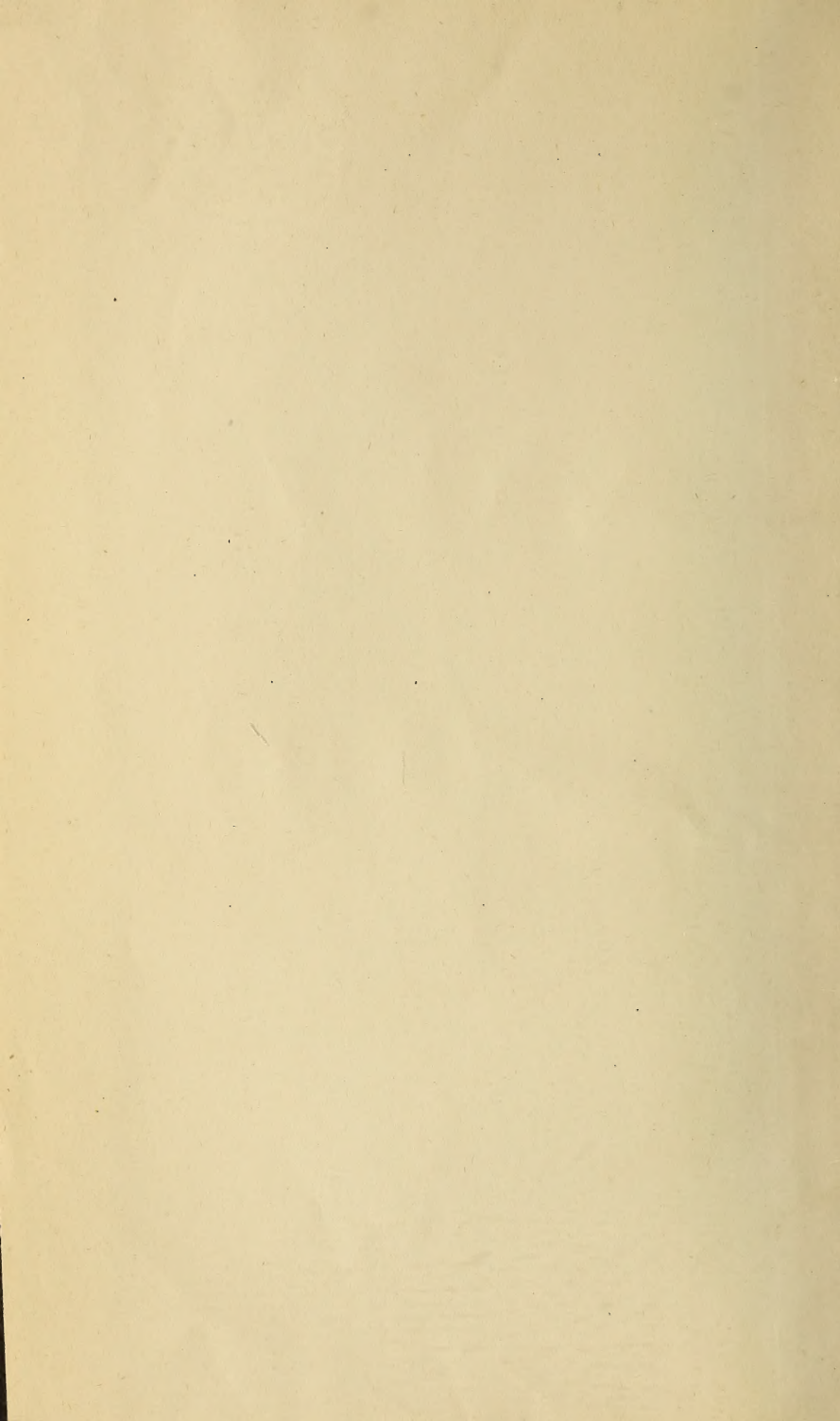


Class PA 254

Book .I7



THE
NEW CRATYLUS

OR

CONTRIBUTIONS TOWARDS A MORE ACCURATE
KNOWLEDGE

OF THE

GREEK LANGUAGE.

BY

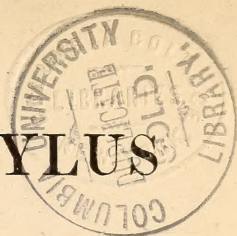
JOHN WILLIAM DONALDSON, D.D.,

CLASSICAL EXAMINER IN THE UNIVERSITY OF LONDON;
AND FORMERLY FELLOW AND CLASSICAL LECTURER OF TRINITY COLLEGE,
CAMBRIDGE.

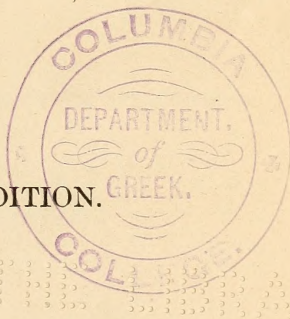
FOURTH EDITION.

LONDON:
LONGMANS, GREEN, AND CO.

1868.



686
1614





PA254
II7

In Exch.

Columbia, Univ. Lib.

YR A9811 1911

2280800 70

Don May 1902,

TO
THE MASTER, FELLOWS, AND SCHOLARS
OF
TRINITY COLLEGE, CAMBRIDGE,
This Work,
ORIGINALLY COMPOSED WITHIN THEIR PRECINCTS,
IS RE-INSCRIBED
AS
A RECORD OF THE AUTHOR'S GRATEFUL ATTACHMENT
TO THAT
ILLUSTRIOUS FOUNDATION.

62132

PREFACE TO THE THIRD EDITION.

IT is a great satisfaction and gratification to me that I have been permitted to complete a third edition of this work. The period of exactly twenty years which has elapsed since it was first published, would have been materially diminished, if I had not postponed the re-appearance of the book, both on the present occasion, and when it was last reprinted, until I had fully availed myself of the renewed opportunity of surveying the wide field which I had endeavoured to embrace. But long as the interval between the first and third editions of my book may seem, when compared with the rapid sale of writings of a more popular character, it is worthy of remark that the other principal treatises on comparative philology have afforded their authors still rarer occasions for revision and reproduction; that with the exception of a part of the first volume, which came out in 1840, Grimm's *Deutsche Grammatik* remains in the form which it had reached when the first edition of this work was published; and that Bopp's *Vergleichende Grammatik*, and Pott's *Etymologische Forschungen*, which appeared, in the first part of each, in 1833, have just reached the commencement of a second edition respectively.

In thus acknowledging the favourable reception which has been accorded to this book, I may seem to place it on the same footing as the three German works to which I have referred, and to provoke a direct comparison of my labours and theirs. On the other hand, the fact that these works were at least commenced before mine, and the references to these and other treatises on philology which abound in the following pages, may have countenanced the opinion, which some ill-informed or in-

considerate readers have been led to entertain, that it has been my object rather to report the result of other men's investigations than to produce a work which would be entitled to claim a distinct and original position in this department of literature. For the credit, therefore, of English scholarship, which is too often subordinated to the learning of Germany, I think it necessary, in publishing a third edition of this work, to direct attention to some of the features which have hitherto distinguished this book from all other treatises on comparative grammar. The numerous contributions to Greek lexicography, and to the interpretation or correction of particular passages in the Greek authors, do not require any mention, and may be left to speak for themselves. But the independence of the work, as a new contribution to comparative philology in general, rests on the same foundation as that of the primary German treatises, and I venture to think that it has done as much as any other book of the same kind to interpret the facts of language, to classify the phenomena, and to discover the laws which regulate the transmutations of sounds in cognate forms of human speech. In support of this conviction, I may appeal to the fact that the most accomplished English philologist of the present century—the late Mr. R. Garnett—has in more than one instance made the principles which were first indicated in this book, the acknowledged starting-point of his own profound and accurate investigations, and that German writers on comparative grammar have tacitly accepted my positions, or have written essays in proof of the combinations which had been already made in my first edition; to say nothing of the numerous and important details in which I have corrected the errors of my most eminent contemporaries. Above all, it must be remembered that this work was, at the time of its first appearance, the only complete treatise on inflected language then in existence either in England or on the continent, and that it inaugurated a new method and a new application of comparative philology, for it was the first attempt to combine speculations affecting the whole fabric

of human speech with the established system and well-trying materials of the old classical scholarship.

But although I am entitled to claim complete originality both for the conception to which this work owes its existence, and for the new combinations, which are exhibited in almost every page, I am most willing to admit the accidental influences which directed my attention to comparative philology at a very early period. It is more than probable that a natural tendency would have led me to engage in lexicographic researches, like those of Ruhnken and Lobeck, and to speculate in Greek and Latin etymology, after the manner of Butmann and Döderlein, even if I had never heard of Grimm or Bopp; but it so happened that, as a student of University College, London, during the first two years of its existence (1828, 1829), I had been made aware of the advantages which might be derived from a study of Sanscrit, and had acquired some knowledge of that language; and having become a contributor to the *Journal of Education* immediately after proceeding to my first degree in 1834, I could not but be struck by Rosen's admirable reviews of Bopp's *Comparative Grammar*, and Pott's *Etymological Researches*, which appeared by the side of my own papers on subjects relating to classical scholarship. The time, at which I was thus once more attracted to comparative philology, was the epochal period of that study; and, for the success of my own special labours, it was fortunate, as I remarked on a former occasion, that I was enabled to abstain from all general speculations in linguistic science until I had passed through the schools of Bentley and Porson, of Buttmann and Hermann, of Niebuhr and K. O. Müller, and had enjoyed the advantages common to all those who have encountered the competitive discipline of the University of Cambridge, advantages which the philological students of Germany are quite unable to appreciate.

The general design of this work was sufficiently stated in the preface to the first edition, and its antagonism to the principles of Horne Tooke is intimated without any reserve

in the introductory chapters (§§ 60—62, 126). Nevertheless, I have from time to time observed a tendency towards a misunderstanding of my general title, and as this may be the last occasion on which I shall have to write a new preface to the book, it may be worth while to explain why I have called this work “The New Cratylus,” and what was its intended form.

When I was first led to a study of general philology, the “Diversions of Purley” was the standard book of reference in this country; a new edition had been recently published; an English dictionary had been commenced in accordance with its theory; and it was generally understood that its principles were unquestionably sound and valid. At an early period, however, I had convinced myself that Horne Tooke’s method was not only vicious in itself, but also a mere reproduction of the linguistic sophistries which Plato had confuted in his *Cratylus*. When, therefore, I had become persuaded that the time had arrived for a radical reform of the current English philology, and saw my way to the attainment of satisfactory results, by making the old classical scholarship of the country my basis and substratum, it was not an unnatural consequence of so wide and ambitious a design that I should follow the established precedent of Francis Bacon, and as he called his treatises in opposition to Aristotle and in imitation of Plato by the now familiar names of *Novum Organon* and “New Atlantis,” I felt myself justified in adopting a similar designation for my onslaught on the *Cratylus redivivus* of Purley, and the winged words of his Heracleitean ultra-nominalism. It was at first my intention to make the parallel complete by assuming, as Horne Tooke had done, the form of a dialogue; and I wrote in this way the two chapters from which I proposed to develop the whole theory of language, namely, those in which I discussed the particles denoting a motive (book III. chapter IV.)* and the verbs signifying will and choice (book IV. chapter V.). But I found this machinery too cumbrous

* It was intended that the whole theory and its details should flow from an inquiry into the origin and structure of *ἔνεκα*.

for the extent of my proposed undertaking, and without carrying the experiment any farther, I adopted the methodical and didactic form in which the work first met the public eye.

Such then are the claims of this work to a primary and independent position. Such are the circumstances in which it originated, and the design which its author proposed to himself. But its permanent usefulness, as a sufficiently popular introduction to the study of Comparative Grammar and Ethnography, must depend on the systematic completeness with which it treats of the necessary details, and its adaptation for continuous perusal. With regard to the former, the analytical tables of contents prefixed to the successive chapters will enable the reader to see whether it neglects any part of the subject. And with regard to the mode of exposition, it has certainly been my wish to write a book which might be read from beginning to end with as much ease as the student would listen to a series of lectures on the same heads. In this particular, at least, I do not fear a comparison with my fellow-labourers in Germany. For I doubt whether any one, who is not already acquainted with philology, would attempt to use the Grammars of Grimm and Bopp except as books of reference, and the new edition, which Pott has commenced of his etymological researches, is a mere farrago of crude materials, a confused lumber-room of ill-arranged information, which the most determined student would not enter without dismay or traverse without wearisomeness.

In the present edition I have carefully revised every page with reference, not only to the general progress of philological knowledge in the last few years, but also to my own studies during the interval, and I hope that the result will be found in a great number of little improvements. There is not so much enlargement as there was in the second edition compared with the first. Still there is a considerable increase of matter; for which I have in some measure made room by a more extensive use of the smaller type, by condensation and by the omission of passages quoted from other authors

or adequately represented in other works of my own. And while the principles of linguistic philosophy advocated in this book remain unaltered, I venture to hope that the competent critic will find them in many places confirmed by new arguments and illustrations.

In conclusion, I repeat here, what I said in the preface to the second edition, that continued experience and reflexion have convinced me of the increasing importance of the task which was for the first time attempted in this work—namely, the prosecution of comparative philology as the safe and ascertained basis of the old classical scholarship. And though a German philologer has at last ventured on a similar undertaking, in which I detect many traces of servile imitation, I have no reason to believe that this book has been superseded by any similar treatise either English or foreign. I have reason to know that it has been hitherto of some use in stimulation, guiding and assisting the studies of young philologers in this country, and it has been formally or virtually adopted as a text-book by more than one great University. Having, then, bestowed great pains on this revision, I venture to renew the hope, with which I concluded the preface to my last edition, that by the increased precision of its results and the greater accuracy of its details it may now contribute in a higher degree to establish a consistent theory of linguistic philosophy, and may connect Greek scholarship by firmer bonds with the general study of human speech and of the co-ordinate laws of thought.

J. W. D.

CAMBRIDGE,
June 10, 1859.

PREFACE TO THE FIRST EDITION.

IN writing this book it has been my object to combine an investigation of general principles with an exposition of particular results; I have endeavoured, on the one hand, to establish a consistent and intelligible theory of inflected language, considered in its most perfect state, that is, as it appears in the oldest languages of the Indo-Germanic family; and, on the other hand, I have attempted to place the Greek scholarship of this country on a somewhat higher footing, by rendering the resources of a more comprehensive philology available for the improvement of the grammar and lexicography of the Greek language, and for the criticism and interpretation of the authors who have written in it. If it is thought strange that I have not confined myself to one or other of these two sufficiently difficult tasks, I may answer, that in the present state of philology it would be impossible to make any real contribution to Greek scholarship without some sound theory of the philosophy of language, and a certain acquaintance with the leading members of the family to which the Greek language belongs; and, conversely, it would not be easy to write an instructive treatise on the internal mechanism and organization of inflected language, without taking some inflected language, by way, at least, of exemplification. Now of all the languages with monosyllabic roots the Greek is the most fitted for this purpose. It is, in the first place, a dead language, and therefore fixed and unchangeable; it is the most copious and expressive of all languages; it stands mid-way between the oldest form of the Indo-Germanic idioms and the corrupted modern dialects of that family, in other words, it has attained to a wonderfully clear and copious syntax without sacrificing altogether, or indeed to any considerable extent, its inflexions and power of composition; it has been more studied and is better known than any other dead language, that is, that facts and phenomena are more completely collected and more systematically arranged than is the case with any other, so that allusions to it are

more generally intelligible, and deductions, or new combinations of laws, derived from it, are safer and more convincing; above all, the value of the literature and the actual demand for a knowledge of the language, should induce us to turn upon the Greek, rather than upon the Gothic, the Latin, or the Sanscrit, any new light which the doctrine of words may have gained from investigations in the philosophy of language or in comparative grammar.

Every didactic work is or ought to be adapted to the wants of some particular class of readers, and should presume, in them, a certain amount of preparatory knowledge and no more. I have written, then, first, for Englishmen, who are not supposed to be intimately or extensively acquainted with the philological literature of the continent: and secondly, I have written for persons who possess at least some slight knowledge of the Greek language, and would rather increase it by investigating the principles of the language and endeavouring to discover the causes of its grammatical peculiarities, than by overloading the memory with a mass of crude, incoherent facts, which can neither be digested nor retained. I have also wished to give those who come to the study of Greek with no higher aim than to make it the means of obtaining University distinctions, an opportunity of learning from it the dignity of human speech, of perceiving how little of the casual and capricious there is in language, and of convincing themselves that in this, as in other things, there are laws to combine, regulate, and vivify the seemingly disjointed, scattered, and lifeless phenomena. It is possible that the novelty of some of my speculations may induce maturer scholars to take up this book. If so, they will understand from this statement, why I have here and there entered upon long explanations of peculiarities, which can occasion no difficulty to the philologist or have been already discussed by German or French writers, and, on the other hand, why I have despatched with a hint or a reference some really difficult questions, in which the young student could take no interest, while the scholar would comprehend my meaning from a single word.

Many people entertain strong prejudices against every thing in the shape of etymology, prejudices which would be not only just but inevitable, if etymology or the doctrine of words were such a thing as they suppose it to be. They consider it as

amounting to nothing more than the derivation of words from one another; and as this process is generally confined to a perception of some *prima facie* resemblance of two words, it seldom rises beyond the dignity of an ingenious pun, and, though amusing enough at times, is certainly neither an instructive nor an elevated employment for a rational being. The only real etymology is that which attempts a resolution of the words of a language into their ultimate elements by a comparison of the greatest possible number of languages of the same family. Derivation is, strictly speaking, inapplicable, farther than as pointing out the manner in which certain constant syllables, belonging to the pronominal or formative element of inflected languages, may be prefixed or subjoined to a given form for the expression of some secondary or dependent relation. In order to arrive at the primary origin of a word or a form, we must get beyond the narrow limits of a single idiom. Indeed, in many cases the source can only be traced by a conjectural reproduction based on the most extended comparison of all the cognate languages, for when we take some given variety of human speech, we find in it systems and series of words running almost parallel to one another, but presenting such resemblances in form and signification as convince us that, though apparently asymptotes, they must have converged in the form which we know would potentially contain them all. This reproduction of the common mother of our family of languages, by a comparison of the features of all her children*, is the great general object to which the efforts of the philologist should be directed, and this, and not a mere derivation of words in the same language from one another, constitutes the etymology that is alone worthy of the name.

As far as this work is a contribution to the better knowledge of Greek in particular, I wish it to be understood, that I have by no means confined myself to etymological researches, but have endeavoured to avail myself of every resource of scholarship, as well old-fashioned as new. The words, which I have attempted to explain, are those which have either occasioned peculiar difficulty to the young student, or the meaning

* I am told that some similar idea is to be found in Campbell's *Gertrude of Wyoming*, a poem which, I am ashamed to say, I have never read.

of which has been considered doubtful by scholars. Where I have thought proper to make a digression for the purpose of interpreting or emending a particular passage, I have always had in view that class of students with whom my experience in teaching has brought me most immediately in contact, and with whose wants and difficulties I am best acquainted. It will be seen, too, that in the selection of passages for this purpose, I have generally confined myself to those authors who are most read in the great schools and Universities of this country. In this part of the work, I have been guided mainly by considerations of practical utility, namely, by a wish to assist those whose business it is to construe Greek authors, and to write Greek exercises. It is for this reason that I have preserved, as far as possible, the old grammatical nomenclature: the young student regards with a sort of mysterious reverence the uncouth terms of his grammar; they are little household gods to him: and, though, like the *Lar familiaris* of old, they are unseemly to look upon and unavailing to help, there appears to be no good reason why one should take them down from the niches, which they have so long and so harmlessly occupied.

It is painful and humiliating to reflect, how much, after all one's thought and labour, the execution of a task like this must fall short, not merely of the exactions of a rigorous criticism, but even of one's own imperfect conceptions. It may be, indeed, that what I have attempted in this book is not yet to be effected by one man and at one effort, and perhaps, in reference to its wider scope, all that I can hope to do, is to awaken the dormant energies of some young student, who may be qualified at a future period to solve completely and finally the great problem of inflected language;—*ἀλλὰ καὶ ἐπιχειροῦντί τοι τοῖς καλοῖς καλὸν καὶ πάσχειν ὅ τι ἂν τῷ ξυμβῇ παθεῖν*.

J. W. D.

TRINITY COLLEGE, CAMBRIDGE,
4th February, 1839.

CONTENTS.

BOOK I.

GENERAL INTRODUCTION.

CHAPTER	SECTIONS	PAGES
I. The utility of philological studies . . .	1— 17	3— 25
II. The history and present state of philology.	17— 40	26— 64
III. The philosophy of language	41— 62	65—111
IV. The ethnographic affinities of the ancient Greeks	63— 97	112—166
V. The theory of the Greek alphabet . . .	98—122	167—217
APPENDIX to Chap. V. § 110. Extracts from Bentley's MS. on the digamma		218—225
VI. The parts of speech	123—128	226—238

BOOK II.

PRONOMINAL WORDS.

I. The personal and other pronouns . . .	129—152	241—278
II. The numerals	153—167	279—311
III. The prepositions	168—187	312—355
IV. The negative and other particles . . .	188—205	356—384

BOOK III.

THE NOUN.

I. The roots of nouns and verbs	206—226	387—420
II. The case-endings of the noun	227—251	421—448
III. The pronominal terminations of the unin- flected forms.	252—270	449—477

CHAPTER	SECTIONS	PAGES
IV. Nouns used as prepositions	271—292	478—501
V. The adjective	293—306	502—523
VI. Compound words	307—344	524—566

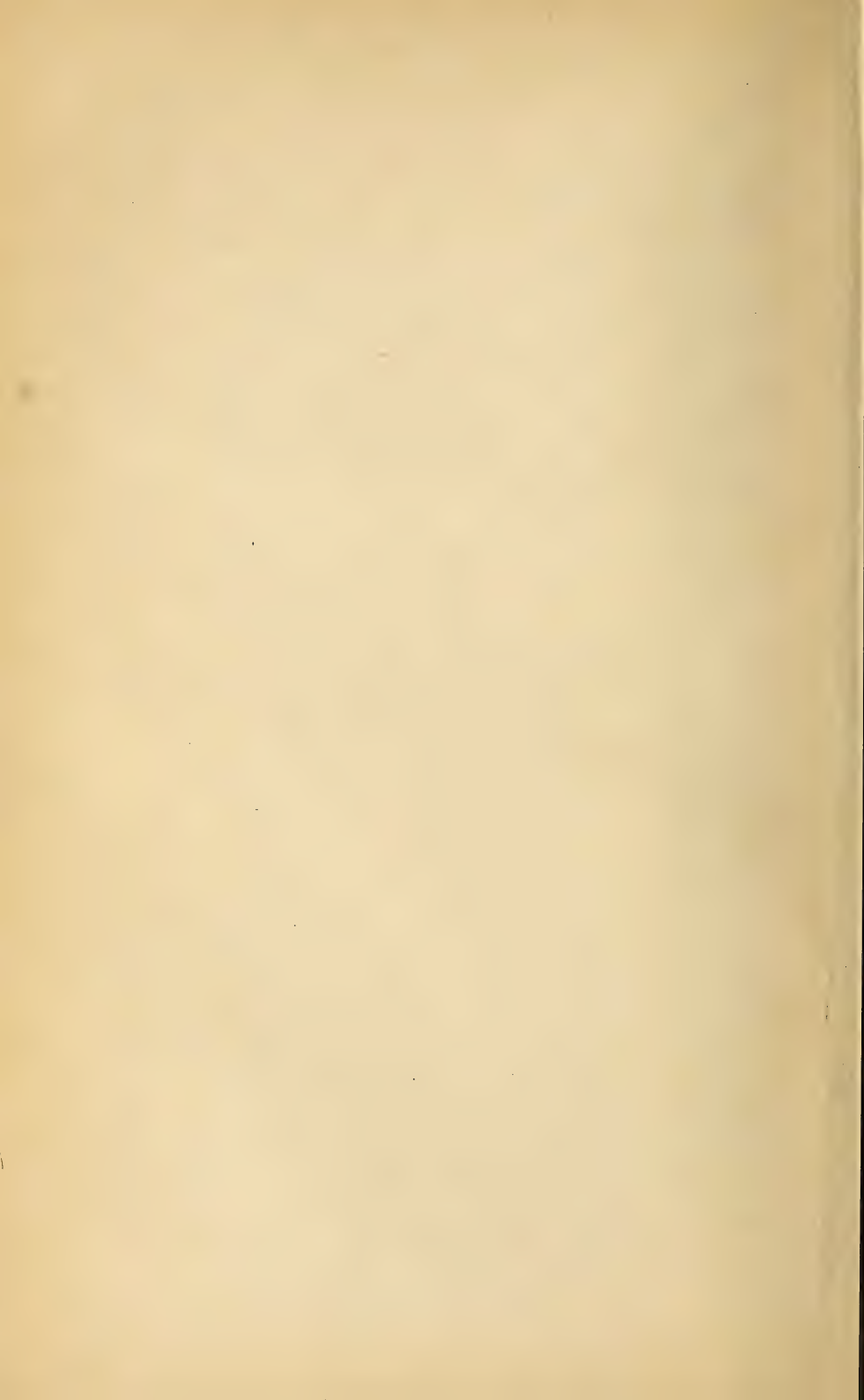
BOOK IV.

THE VERB.

I. The person-endings	345—366	568—592
II. The tenses	367—387	593—616
III. The moods and participles.	388—424	617—653
IV. The conjunctions	425—443	654—671
V. The use of auxiliary verbs in Greek	444—481	672—724

BOOK I.

GENERAL INTRODUCTION.



THE NEW CRATYLUS.

BOOK I.

GENERAL INTRODUCTION.

CHAPTER I.

THE UTILITY OF PHILOLOGICAL STUDIES.

1 Motives for a preliminary inquiry respecting the practical usefulness of philological learning. 2 Education, information, and knowledge, often confused. I. *Philology necessary to education.* 3 Definition of Philology. 4 Liberal and professional education. 5 Philology contributes to liberal education by teaching deductive habits. 6 Study of dead languages recommended by their fixity. 7 Advantage of learning any foreign language. 8 Value of ancient literature. 9 Comparative grammar leads to extensive acquisitions. II. *Philology an important branch of general knowledge.* 10 Worth and dignity of ethnographical science. 11 Changes of population and government clearly indicated by language. 12 Study of language belongs to a great branch of inductive Philosophy. III. *Philology valuable as the method of interpretation.* 13 Historical criticism derived from Philology. 14 The philologer mediates between reason and tradition, and pleads for a maximum of belief. 15 Importance of Philology for the divine, both as the method of interpretation, and a branch of ethnographical science. 16 Classical education, to whatever extent it is carried, ought to be rational and philological.

1 IT may be stated as a fact worthy of observation in the literary history of modern Europe, that generally, when one of our countrymen has made the first advance in any branch of knowledge, we have acquiesced in what he has done, and have left the further improvement of the subject to our neighbours on the continent. The man of genius always finds an utterance, for he is urged on by an irresistible impulse—a conviction that it is his duty and his vocation to speak: but we too often want those who should follow in his steps, clear up what he has left obscure, and complete his unfinished labours. Nor is it difficult

to show why this should be the case. The English mind, vigorous and healthy as it generally is, appears to be constitutionally averse from speculation; we have all of us a bias towards the practical and immediately profitable, generated by our mercantile pursuits, which make all of us, to a certain extent, utilitarians, and stifle the development of a literary taste among us; or, if the voice of interest fails to control the vanity of authorship, there is still another modification of self-love, a cold conventional reserve, induced by the fear of committing one's self, which imposes silence upon those who have truths to tell.

To this general fact, however, there is one very remarkable exception. The regulations of our grammar-schools, and, perhaps, somewhat of the old custom and antiquated prejudice, of which we hear so much, have made classical studies not only the basis, but nearly the whole of a liberal education in this country; and circumstances, which we shall point out in the following chapter, have created for us a thriving philological literature. Although the rewards and encouragements held out by our great Universities have been considered by many as a sufficient justification of such studies, it is the spirit of the age to inquire, what advantage a young man derives from so protracted a study of Latin and Greek, in addition to and independent of the University distinctions and emoluments which he may have the good fortune to obtain. There is much of reason in this demand, and it is doubtless incumbent upon those who have devoted themselves to such pursuits to point out to others their importance and utility. Hitherto this has not been done in a satisfactory manner; and therefore, although our object is rather to add something to philological knowledge than to justify philological pursuits, we deem it a necessary preliminary that we should endeavour by some plain arguments to recommend to our readers the sort of learning which we wish to increase and the studies which we design to facilitate—that we should make known at the very outset the nature and value of the subject on which we write. And in doing this we disclaim any wish to perplex ourselves with the polemics of the question, as it has been treated by other writers. It is not our purpose to discuss the merits or demerits of our collegiate institutions, still less to impugn or exculpate, as the case may be, the conduct of those who are

intrusted with the management of them: least of all would we assert that there is no room for improvement in the present method of our classical studies; on the contrary, we hope and indeed expect that, sooner or later, they will be pursued in a healthier and a manlier spirit, that much that is superfluous will be retrenched, much that is useful added, so that even the educational theorist may at length admit that there is something more in nouns and verbs than was dreamt of in his philosophy. Our only aim in this place is to satisfy the practical sense of our countrymen with regard to the real uses of philology, properly pursued: how it is and has been prosecuted will appear in the next chapter*.

2 The cause of all the unprofitable discussions which have arisen respecting the utility of particular branches of study is to be sought in the vague and erroneous manner in which we use the terms education, information, and knowledge. We are in the habit of speaking of mere information as though it were the same thing as exact knowledge, and we still more frequently allow special or professional knowledge to assume the honours which are due to general education. It is surely desirable that these terms should be properly defined, and used only according to their true signification; for there is no realism more oppressive than the dominion of terms which stand as the representatives of indefinite ideas. We believe that the following distinctions will be found to agree with the opinions of the majority of reflecting men in this country. The term *Education*, which signifies "a leading out," or "bringing up," is particularly applied to the training of the young: but it is equally applicable to any process which is calculated to discipline an uncultivated mind, whether the bodily growth be matured or not. The idea conveyed by the word might be explained in metaphorical language as a bringing forth from darkness into light,—it is a leading up from some

* The author has fully discussed all the questions immediately connected with the modern developments of intellectual discipline in a separate work, intitled: *Classical Scholarship and Classical Learning considered with especial reference to competitive tests and University teaching: a practical essay on liberal education*. Cambridge, 1856.

narrow and confined valley to the summit of a lofty mountain, whence the elevated soul obtains a Pisgah view of truths and duties—it is a careful survey of the domains of intellectual and moral principles, which stretch before us when the sun-light of reason has cleared away the mists of vulgar prejudice. We fall into a mistake if we suppose that education is limited to mental culture; it may be social and moral, as well as intellectual; and we even give the name of spiritual education to that higher moral training which emanates from the schooling of Christianity. But to confine ourselves, for our present purpose, to its intellectual province, we may say that Education is properly a cultivation and development of those reasoning faculties, which all men have in common, though not all in the same degree. The term *Information*, on the contrary, although, according to the origin of the word, it ought to be synonymous with intellectual education, is generally understood to signify only an accumulation of particular facts. When we speak of a well-informed man, we generally mean some one who is able to return plausible answers to the catechism of ordinary conversation; and the common phrase “a smattering of information on all subjects” shows that the term is not supposed to imply a profound or extensive acquaintance with any one branch of knowledge. In fact, so long as information is *only* information, it merely denotes an accumulation of stray particulars by means of the memory. On the other hand, *Knowledge* is information appropriated and thoroughly matured. It implies experience and practice, and it differs from information as the food, which is taken into the system, and to which we owe our strength and growth, differs from the garments which hang loosely about us, and which may be laid aside or worn out. We must not however forget that information may be concentrated and ripened into knowledge; for knowledge begins with and presumes information; though information does not presume or include knowledge. Our common phrases show that this is the meaning of the term. We speak of knowledge of the world, knowledge of our profession or business, knowledge of ourselves, knowledge of our duties—all of which imply a completeness and maturity of habit and experience. When knowledge extends to a methodical comprehension of general laws and principles, it is called science. It is the natural and

proper tendency of information to ripen into knowledge, just as knowledge itself is not complete until it is systematized into *Science**; but as the difference between information and knowledge is one of kind rather than of degree, it is clear that no mere accumulation of useful information, not even though it equalled all the stores laid up in Mr Maunder's treasure-houses, would amount to exact knowledge or scientific acquirement. We do not think it worth while, therefore, to show that philology is a branch of useful information. If it does not contribute to valuable and important knowledge, or if it is not ancillary to the best kind of education, we shall waste our time in pleading for the utility of a study which necessarily demands minute attention and laborious research.

3 We maintain, then, first, that a certain amount of philology is necessary as the basis of a liberal *education*; and secondly, that, cultivated to its fullest extent, philological scholarship furnishes valuable and essential contributions to general *science*, and to some of the most important applications of human *knowledge*.

Under the name philology we include the two great branches of a scientific inquiry into the principles of language;—the theory of the origin and formation of words, which is generally called the philosophy of language; and—the method of language, or, as it is more usually termed, logic or dialectic, which treats of the formation of sentences†. As a specific department

* We have a striking exemplification of this in the series of works published by the *Society for the Diffusion of Useful Knowledge*. Beginning with an attempt to disseminate popular information on a variety of subjects, these treatises very soon aimed at communicating exact and scientific knowledge, and some of them are even replete with learning derived from the older schools of classical philology.

† This appears to be the real extent of the term philology. While W. von Humboldt, however, would confine it to that department which is conversant about the interpretation of the written monuments of a language, as distinguished from the analysis of its structure and comparison with other idioms, which he calls *Linguistik* (*über die Verschied. d. menschl. Sprachbaues*, p. 202); his most enthusiastic disciple has claimed for philology a domain which includes all recorded knowledge. "It appears to me," says H. Steinthal (*De Pronomine Relativo Commentatio Philoso-*

of study, philology deals with language for its own sake; and though it originated in the verbal criticism and interpretation of a literature which had become classical or sacred, it does not properly comprehend all that falls within the province of the editor and commentator. The philologist, as such, does not deal with the subject-matter of the authors, whose diction he examines with such minute and searching accuracy; nor does he undertake to expound the rules of rhetoric and the theory of taste. He has exhausted his proper functions, when he has investigated scientifically all that relates to the ultimate analysis of the separate terms, and the construction of the subject and predicate. These two departments are comprised in general grammar, which is therefore identical with philology, and have also their representatives in the etymology and syntax of every particular

phico-Philologica, Berolini, 1847, pp. 4, 5), "that it is the business of the human understanding, or of literature in general, to comprehend those simple and absolute laws which appear in the *world* or in *nature* on the one hand, and in the *history of the human race* on the other hand. As, therefore, there are two forms of literature,—one, the *history of nature*, or *physiology*; the other, the *history of the human mind*,—philologists undertake the examination of all that the *lóyos*, or human reason, has produced. Now, whatever the human reason produces is some idea, something recognised and discerned by the mind, although it may be clothed in some outward form, whether it be a form of government constituted by human society: or some monument of hewn stone: or some type of mythology and religion: or some demonstrative result of philosophical acuteness: or some outpouring of poetical genius or oratorical eloquence. So that even the history of philology belongs to philology, with this limitation, that, *e.g.*, the history of classical philology is the specialty of those who consider modern life from a philological point of view. Accordingly, the only true definition is Böckh's, that *philology* is the *teaching and learning of that which is already discovered* (*philologiam esse cogniti cognitionem*); which is not to be understood, as though philologists were always doing over again the work done to their hands; but all the products of the human mind which remain as recorded facts have to be submitted afresh to the crucible of human thought, to the end that, being recognised, not as the arbitrary acts of individuals, but as sprung from the necessary laws of minds individually free, they may be regarded as a mirror or picture of the human reason in general." We have fully considered the various applications of philological research, as indicated by its origin or its procedure, in the *Encyclopedia Britannica*, ed. 8, Vol. xvii. article "Philology."

grammar. Although they are but component parts of one science, it is of the utmost consequence that they should not be confused or interchanged: for it is not too much to say that the most signal mistakes of philologists may be traced to the practice, hitherto so common, of supposing that the formation of words may be discussed on a logical basis. In endeavouring, then, to estimate the importance of philology we must consider as separate questions, what is the use of etymology or the doctrine of words, and of logic or the doctrine of sentences: including under the latter all that belongs to the method of language, and under the former whatever pertains to its origin and generation. And in the first place it is to be shown, that the rudiments of philology in both its branches are or ought to be the basis of the intellectual training of man, or of that education which is alone worthy of the name. As logic, or the method of language, though properly secondary to etymology, is of more ancient discovery, we shall consider it first.

4 From what has been already said it will be seen that we distinguish between education properly so called, and the training which is necessary for the successful prosecution of any profession or business. The former, as has been already said, is designed for the cultivation of the intellect and the development of the reasoning faculties. The latter is intended to adapt a man for some particular calling, which the laws of society, on the principle of the division of labour, have assigned to him as an individual member of the body politic. Now the training of the individual for this particular purpose is not an education of man as such; he might do his particular work as well, or better, if you deprived him of all his speculative faculties and converted him into an automaton; in short, the better a man is educated professionally the less is he a man; for, to use the words of an able American writer*, "the planter who is Man sent out into the field to gather food, is seldom cheered by any idea of the true dignity of his ministry. He sees his bushel and his cart, and nothing beyond, and sinks into the farmer, instead

* See *An Oration before the Phi-Beta-Kappa Society*, by Ralph Waldo Emerson, p. 5.

of Man on the farm. The tradesman scarcely ever gives an ideal worth to his work, but is ridden by the routine of his craft, and the soul is subject to dollars. The priest becomes a form; the attorney, a statute-book; the mechanic, a machine; the sailor, a rope of a ship." It was for this reason that the clear-headed Greeks denied the name of education (*παιδεία*) to that which is learned, not for its own sake, but for the sake of some extrinsic gain or for the sake of doing some work; and distinguished formally between those studies which they called liberal, or worthy of a free man, and those which were merely mechanical and professional*. In the same way Cicero speaks of education properly so called, which he names humanity (*humanitas*)†, because its object is to give a full development to those reasoning faculties which are the proper and distinctive attributes of man as such‡. Now we do not pretend that philology is of any mechanical or professional use, unless the business of the teacher is to be regarded as a professional employment: we do not say that philology will help a man to plough or to reap; but we do assert that it is of the highest use as a part of *humanity*, or of education properly so called.

5 The test of a good education is the degree of mental culture which it imparts; for education, so far as its object is scientific, is the discipline of the mind. The reader must not overlook what is meant by the word "mind" when used in reference to education. That some dumb animals are possessed of a sort of *understanding* is admitted; but it has never been asserted, by those who pretend to accuracy and precision of language, that they enjoy the use of *reason*. Man, however, has the faculty called reason in addition to his understanding; he has a power of classifying or arranging, abstracting and gene-

* See Plato, *Legg.* i. p. 643 E: ταύτην τὴν τροφὴν (τὴν πρὸς ἀρετὴν ἐκ παιδῶν παιδείαν) ἀφορισάμενος ὁ λόγος οὗτος, ὥς ἐμοὶ φαίνεται, νῦν βούλοισ' ἂν μόνην παιδείαν προσαγορεύειν, τὴν δὲ εἰς χρήματα τείνουσαν ἢ τινα πρὸς ἰσχὺν ἢ καὶ πρὸς ἄλλην τινὰ σοφίαν ἄνευ νοῦ καὶ δίκης βάνασόν τε εἶναι καὶ ἀνελεύθερον καὶ οὐκ ἀξίαν τὸ παρὰ πᾶν παιδείαν καλεῖσθαι. Similarly Aristotle, *Polit.* viii. c. 2.

† *Pro Archia Poeta*, 1; *De Oratore*, i. 9.

‡ Aul. Gellius, xiii. 16.

ralizing, and so arriving at principles*; in other words, his mind is capable of method: and thus it has been well said that we at once distinguish the man of education, or, among men of education, the man of superior mind, by the unpremeditated and evidently habitual *arrangement* of his words, grounded on the habit of foreseeing, in every sentence, the whole that he intends to communicate in the particular case, so that there is *method* in the fragments of his conversation even when most irregular and desultory†. Accordingly, what we mean by saying that the object of education is the cultivation of our minds, or that the goodness of an education varies with the degree of mental culture, amounts simply to this, that we better perform our functions as rational creatures in proportion as we carry farther the distinction between ourselves and the brute creation, that is, in proportion as we are the better fitted for the discourse of reason.

There are two ways in which we carry on the process of reasoning, just as there are two relations out of which all method or science is made up. The relations are, that of Law, by which we lay down a rule of unconditional truth which we call an Idea, and that of Observation, by which we get to a distinct knowledge of facts. By the former we know that a thing must be; by the latter we see that it is. Now when we reason from the facts to the law, we call it analysis or induction; when we reason from law to law, when from a known truth we seek to establish an unknown truth, we call the process deduction or synthesis. As then all science is made up of Law and Observation, of the Idea and the Facts, so all scientific reasoning is either induction or deduction. It is not possible, however, to teach inductive reasoning, or even to cultivate a habit of it directly; we all reason inductively every moment of our lives,

* As the general reader may not perhaps be familiar with the Kantian distinction of reason and understanding, it may be mentioned, that, according to the critical philosophy, *understanding* is the faculty of rules, derived from experience, and proverbially subject to exceptions, but *reason* the faculty of principles or laws, to which there is no exception: the former is the faculty of the unity of phænomena by means of rules, the latter the faculty of the unity of the understanding-rules under principles (*Kritik der reinen Vernunft*, pp. 258, 260. 7th edition).

† Coleridge's *Friend*, Vol. III. pp. 133 foll.

but to reason inductively for the purposes of science belongs only to those whose minds are so constituted that they can see the resemblances in things which other men think unlike, in short, to those who have powers of original combination and whom we term men of genius. If, therefore, we can impart by teaching deductive habits, education will have done its utmost towards the discipline of the reasoning faculties. When we speak of laws and ideas we must not be misunderstood as wishing to imply any thing more than general terms arrived at by real classification. About these general terms and these alone is deductive reason conversant, so that the method of mind, which is the object of education, is nothing but the method of language; and this is the reason why, as we have said, the educated man is known by the arrangement of his words. Hence, if there is any way of imparting to the mind deductive habits, it must be by teaching the method of language; and this discipline has in fact been adopted in all the more enlightened periods of the existence of man. It will be remembered, that in this method of language it is not the words but the arrangement of them which is the object of study; and thus the method of language is independent of the conventional significations of particular words; it is of no country and of no age, but is as universal as the general mind of man. For these reasons we assert that the method of language, one of the branches of philology, must always be, as it has been, the basis of education or humanity as such, that is, of the discipline of the human mind. We may even go farther, and assert, that, when Geometry is added to Grammar, we have exhausted the known materials of deductive reasoning, and have called in the aid of all the machinery which is at our disposal.

With regard to the importance of etymology as a part of a liberal education very little need be said. It is just as necessary that the educated man should be able to select and discriminate the words which he employs, as that he should be able to arrange them methodically. We acquire our mother-tongue insensibly and by instinct, and to the untrained mind the words of it are identified with the thoughts to which they correspond in the mind of the individual, whereas he ought at least to be taught so much of their analysis as to know that they are but

outward signs, the symbols of a *prima facie* classification, and to employ them accordingly. In this simplest form etymology is nothing but an intelligent spelling lesson, which the most violent utilitarian would hardly venture to discard. When, however, we remember that the most important result of intellectual education is the overthrow of one-sided prejudices, and when we reflect how apt we are to fall into practical *Realism*, and "to apply the analytical power of language to the interpretation of nature*," we cannot value too highly that habit of dealing with words, which leads us to distinguish accurately between the mere sign and the thing signified.

6 But, though perhaps every one will at once allow that such a knowledge of language as we have described is an essential element of intellectual training, it may still be asked, What has this to do with the study of two dead languages? In the first place, then, to study one branch at least of philology, namely, Etymology, we must have some particular language in which to study it; and although the method of language is independent of any particular language, yet, like every other method or science, it must have its facts as well as its laws. It will be conceded that if we would go beyond the rudiments of spelling and speaking, if we would catch a glimpse of what speech is in itself and as detached from ourselves, it would be desirable to select some foreign language, and if possible one no longer spoken or liable to change: for idioms still in use are so fluctuating and uncertain, that an attempt to get fixed ideas of the general analogy of language from them is like trying to copy the fantastic pictures of an ever-revolving kaleidoscope. The classical languages lie before us in gigantic and well-preserved remains, and we can scrutinize, dissect, and compare them with as much certainty as we should feel in experimenting upon the objects of any branch of natural philosophy. They are, therefore, well adapted to supply us with the facts for our laws of speech or the general analogy of language; and we might make them the basis of our grammatical study, even though they had nothing to recommend them but their permanence of form and perfection of grammatical structure.

* Hampden, *Bampton Lectures*, p. 88.

7 This, however, is not all: it is indeed necessary to study some language, and that too a dead language, in order to give the mind a full grammatical training; but the mere fact of learning another language, whether dead or living, is in the highest degree beneficial. We learn our own language from the lips of a mother or a nurse, it grows with our growth, and strengthens with our strength, so as to become a sort of second self; and the words of the uneducated are household gods to him. This idolatry is shaken, the individual is brought away from his own associations to the higher truths which form the food of the general mind of man, whenever he has learned to express his thoughts in some other set of words. It was a great mistake of Ennius to say that he had three hearts because he understood three languages (Aulus Gellius, *Noctes Atticæ*, xvii. 17); the heart of a people is its mother-tongue only (*Jean Paul*, XLVII. p. 173). The Emperor Charles the Fifth was nearer the truth when he said—*autant de langues que l'homme sait parler, autant de fois est-il homme*;—for every language that a man learns he multiplies his individual nature and brings himself one step nearer to the general collective mind of Man. The effect of learning a language, then, consists in the contrast of the associations, which it calls up, to those trains of thought which our mother-tongue awakens. In this again the dead languages possess a great advantage over every living one. It has been well remarked “that our modern education consists in a great measure in the contrast between ourselves and classical antiquity*,” it is a contrast produced by a sleep of more than a thousand years between the last of the great men of old and the first of the great moderns, when the reawakened world looked with instructive astonishment upon its former self.

8 In addition to the two reasons which we have stated as grounds for preferring the two classical languages as materials of grammatical study, there is a third reason which has generally been thought to be alone sufficient,—the value of the literature to which they are a key. On this particular subject we do not intend to dwell; books without number have been written upon

* W. von Humboldt, *über die Verschiedenheit des menschlichen Sprachbaues*, p. 27.

it, and there does not seem to exist a doubt as to the paramount excellence of the Greek and Latin writers. To those who still argue the old question about the comparative merits of modern and ancient literature, it is sufficient to answer, that, if the old classical literature were swept away, the moderns whom they so admire would in many cases become unintelligible and in all lose most of their characteristic charms*. And, independently of the influence which Greek literature has produced, both directly and through the Latin, on that of Modern Europe, and of those special causes, which have made it, as a whole, the inalienable heir-loom of the highest civilization, the greatest inheritance of genius and wisdom, and the most effective instrument of liberal culture that the world has ever produced, we must recollect that all ancient records have a value, which no modern efforts can replace, in linking the thoughts of the present to the recollections of the past, and in laying a firm foundation for the hopes of the future. Literature, as we have elsewhere said, does not admit of perpetual recommencements and repetitions, and when perfection has been once attained in any department of intellectual productiveness, subsequent generations and other races of men, who have access to the treasures of recorded wisdom, feel themselves constrained to abandon a fruitless rivalry, and to work out the expression of their own thoughts according to the established model and exemplar†.

9 Lastly, the introduction of that branch of philology which we call comparative grammar offers a great recommendation to the careful study of these two languages. Notwithstanding the beneficial contrast which they present, they are aged sisters of our own mother-tongue, and studied according to the true philological method in combination with the Asiatic members of the family, they open the way to an easy and speedy acquirement of every one of the Indo-Germanic languages, and are thus a key to the greatest treasure which the mind of man has collected,—the recorded wisdom of the Caucasian race.

* See Sedgwick, *Discourse on the Studies of the University*, 4th edit. p. 36; and Whewell, *On the Principles of University Education*, p. 35.

† See the article *Philology* in the *Encyclopedia Britannica*, Vol. xvii. ed. 8, and *Literature of Greece*, Vol. iii. p. 409.

10 From what we have said it appears that for the mental training of the individual some philology is necessary; that grammar is best studied through the classical languages; that the study of these languages is also recommended by their contrast to our own, by the value of the literature to which they are the key, and by their place in the family of languages to which our own tongue belongs. These are reasons why the individual who is to be *liberally* educated, should study Greek and Latin. But the advantages of philological studies are not confined to the individual. They may be cultivated to a higher degree than is necessary for the mere purposes of education, and be made to contribute to some of the most valuable and interesting applications of human knowledge. The claims of ethnological philology to rank as a principal branch of general science have been sufficiently vindicated of late years. The British Association for the Advancement of Science, at its meeting in 1847, was thus addressed by Bunsen*: "If man is the apex of the creation, it seems right, on the one side, that a historical inquiry into his origin and development should never be allowed to sever itself from the general body of natural science, and in particular from physiology. But, on the other hand, if man is the apex of the creation, if he is the end to which all organic formations tend from the very beginning; if man is at once the mystery and the key of natural science; if that is the only view of natural science worthy of our age—then ethnological science, once established on principles as clear as the physiological are, is the highest branch of that science for the advancement of which this Association is instituted. It is not an appendix to physiology or to any thing else; but its object is, on the contrary, capable of becoming the end and goal of the labours and transactions of a scientific institution." Those who are jealous for the dignity of man will not fail to echo these sentiments. Ethnology, which treats of the different races into which the human family is subdivided, and indicates the bonds which bind them all together, has not only appropriated to itself all the functions of the anthropology, which discussed the natural and moral, the physical and metaphysical history of man, but has exacted contributions from

* *Report*, p. 257.

other sciences which were once independent of it. Anatomy, chemistry, geography, history, grammar, and criticism have each brought a stone to this great fabric; and it is reasonable that this should be the case. For when the very *Kosmos* finds in man the most beautiful exemplifications of its own perfect harmony and order, universal science should recognise in the science which treats of man, its object, its aim, and its end.

11 There is in fact no sure way of tracing the history and migrations of the early inhabitants of the world except by means of their languages; any other mode of inquiry must rest on the merest conjecture and hypothesis. It may seem strange that any thing so vague and arbitrary as language should survive all other testimonies, and speak with more definiteness, even in its changed and modern state, than all other monuments however grand and durable. Yet so it is; we have the proof before us every hour. Though we had lost all other history of our country, we should be able to tell from our language, composed as it is of a substratum of Low German with deposits of Norman-French and Latin—the terms of war and government pertaining to the former of the superinduced elements, the terms of ecclesiastical and legal use to both of them—that the bulk of our population was Saxon, and that they were overcome and permanently subjected by a body of Norman invaders; while the Latin element would show us how much that language had been used by the lawyers and churchmen. We know too that the inhabitants of Wales, of the Highlands of Scotland, and of the Isle of Man, speak a Celtic dialect; and from the position of these people we should infer that they were the earliest inhabitants of the island, and were driven into the mountains by the Saxon invaders. Even the names of places would tell us as much. When we hear a stream called Wans-beck-water, and know that the three words of which the compound is made up all signify “water,” the first being Celtic (as in *Wan’s-ford*, *A-von*), the second German (*beck*=*bach*), the last English, we at once recognise three changes of inhabitants to whom the older name successively lost its significance*. It has been the same with other countries also. Persia, for

* See *Varronianus*, p. 45.

instance, has been under the dominion of Mohammedan conquerors for twelve hundred years, and we find an immense number of Arabic words naturalized in the country; but the language which forms the basis of the whole, and the general organization and grammar, are as entirely Indo-Germanic as if the country had never had any intermixture of an Arabian population. But above and beyond these results, to which historical records directly contribute, the comparative philologist is enabled, by an examination of the common elements of language, to ascertain the nature of the civilization which men enjoyed, and of the religious belief and worship which represented their spiritual aspirations, at the time, otherwise beyond the reach of human research, when the undivided family of a race was still collected round its hearth and home, and had not yet sent forth its colonies to people distant lands. These two applications of philological research, the former of which we have proposed to call "the linguistic records of civilization," and the latter of which is known as "comparative mythology," are the most recent results of philological ethnography, and they promise, if pursued with sobriety and caution, to lead to discoveries at once certain and important*.

12 The study of language, therefore, in its wider range may be used as a sure means of ascertaining the stock to which any given nation belonged, and of tracing the changes of population and government which it has undergone. It is indeed perfectly analogous to Geology; they both present us with a set of deposits in a present state of amalgamation which may however be easily discriminated, and we may, by an allowable chain of reasoning, in either case deduce from the *present* the

* See *Encycl. Brit.* ed. 8, Vol. xvii. pp. 537, 538. The subject of Comparative Mythology is very ably treated by Prof. Max Müller in the *Oxford Essays* for 1856. The linguistic records of civilization are illustrated in the introduction to Theodore Mommsen's *History of Rome*, which has been translated into English (*The Earliest Inhabitants of Italy*, translated from Mommsen's *History of Rome*, by G. Robertson, Lond. 1858, pp. 9 sqq.), and in A. Kuhn's essay on *die Sprachvergleichung und die Urgeschichte der indogermanischen Völker* (*Zeitschrift f. d. Vergleich. Sprachf.* iv. pp. 81 sqq.).

former condition, and determine by what causes and in what manner the superposition or amalgamation has taken place. The excellent historian of the Inductive Sciences* would group these and other speculations together in a separate class, considering them all “as connected by this bond, that they endeavour to ascend to a past state of things, by the aid of the evidence of the present.” He would term them *palætiological* sciences, and the sanction of his distinguished name will perhaps give currency to this coinage of his private mint. In that case, the classical scholar will wish that he had been induced to select some designation more strictly in accordance with analogy and more plainly expressive of his meaning. As the word *archæology* is already appropriated to the discussion of those subjects of which the antiquity is only comparative, it would be consistent with the usual distinction between ἀρχαῖος and παλαιός to give the name of *palæology* to those sciences which aim at reproducing an absolutely primeval state or condition; or if we were anxious to express that the objects of our science are not only absolutely old, but, in the particular cases, constitute the originals and beginnings of their class, we might indulge in the combination *palæ-archæo-logy*†. But whatever denomination we may agree to employ, it is clear that linguistic ethnology is entitled to the most prominent place among its sister sciences.

13 But the application of philology to the case of ethnography is by no means its only use. Language is the oldest of historical monuments; indeed, it enables us to go back to a period long antecedent to the first beginnings of history, and to

* Vol. III. p. 481.

† The distinction between παλαιός and ἀρχαῖος is well given by Reiske, *ad Lys.* p. 107, 41: “παλαιόν et antiquum est solummodo rationem habet temporis: ἀρχαῖον autem est quod ab initio rerum aut reipublicæ cujusdam semper ita fuit actitatum, ut semel antiquo ritu fuit institutum.” This distinction is well marked in the compounds παλαιόπλοτος, applied to a place, Thucyd. viii. 28, § 3, and ἀρχαῖόπλοτος, applied to a person, Æsch. *Agam.* 1013. The ancients constantly used these synonyms in juxtaposition, and a very slight parody of Sophocles would aptly describe a bone of the Dinotherium as ὅστων παλαιὸν ἀρχαῖον ποτὲ θηρὸς (*Trachin.* 555).

trace the migrations of a people among whom history has never existed. But philology is also conversant with the interpretation of historical documents. It is philology which has extracted a wonderful array of chronological data from the hieroglyphical monuments of ancient Egypt. It is philology which has recognised the contemporaneous history of Darius in the cuneiform inscriptions of Behistun. It is philology which promises important revelations from a survey of the long-buried sculptures of Nineveh. And while the science of language deals thus familiarly with the contemporaneous records of ancient history, which modern research has discovered, or which have long been exposed to the careless eyes of an unobserving world, it belongs to the same instrument to test the genuineness and accuracy of traditionary annals which have been embellished and diffused by a more modern and popular literature. Historical criticism is the legitimate offspring of philology. Its functions are not destructive, but rather, in the highest degree, conservative: for its chief aim is to ascertain and establish the granite basis of history which is overlaid by the more recent strata of poetical, philosophical, and religious mythology*. It is true that there are still persons, especially in this country, who plead for the undisturbed enjoyment of an ignorant and childish credulity, and whose acceptance of historic truth is so intimately connected with their adoption of the legendary ingredients which enter so largely into all ancient records, that, for them, the kernel and the shell are irrevocably identical, and facts and fictions must stand or fall together. It is true also that those whose feeble conscience leans for support on

* "Denkmäler bilden das Zifferblatt der Geschichte; so lange diese nicht vorhanden sind, gehört einem Volke nur seine Gegenwart, nicht seine Vergangenheit, es lebt *ohne Geschichte*. Verliert ein Volk seine Denkmäler, sei es durch eigne Schuld oder die der Verhältnisse, so wird es auch seine Geschichte nicht retten können, sie geräth in Unordnung, wird zur Tradition, und gewinnt *im besten Falle* statt des verlorenen rein geschichtlichen ein anderes Prinzip der innern Ordnung, ein *poetisch-mythologisches* wie bei den Griechen, ein *philosophisch-mythologisches* wie bei den *Indiern*, oder ein *religiöses* wie bei den Israeliten, verliert aber stets ihren ursprünglichen *zeitgeschichtlichen* Werth." Lepsius, *Chronologie der Ägypter*, pp. 1, 2.

some authority supposed to be infallible, as well as those who are interested in the maintenance of such a tribunal of final appeal, are still as heretofore occupied with endeavours to check the inquisitiveness of our philisophical instincts. But the time is long passed and gone, when timid science, wearied with fruitless investigations, could be induced to sell its birthright of expectations for the tasteless mess provided and prepared by an eager and suspicious bigotry. Convinced of the truth of its own conclusions, inductive philosophy needs no support from without; and it has become incumbent upon those who advocate the claims of an assumed authority, to find some common ground on which it may succeed in reconciling its pretensions with the demonstrable truths of science.

14 Now it is philology alone, acting principally through its chief instrument, historical criticism, which can effectually mediate between tradition and reason; for it is philology alone which finds its materials in the former, and derives its principles from the latter. To the mere votary of abstract science, it matters not what opinions have been held by the most civilized nations of antiquity; he is not interested in attempts to indicate the first beginnings of his own speculations; satisfied with the possession of truth, he cares little who first discovered it. But the philologer, whose main principle is a recognition of the unity of human nature and of language as the necessary associate and exponent of reason, is as much concerned with the opinions of primitive Egyptians and Aramæans as with those of his own contemporaries; and he is predisposed to believe that there must be some portion of divine truth in that which man has in all ages accepted as binding on his faith and conscience. He is anxious therefore that a maximum of ancient history should be established on a scientific basis; and while he examines ancient documents with the rigorous accuracy which philosophy demands, he handles the recorded utterances of the past with a veneration which satisfies every enlightened believer. If the Christian religion is to maintain its distinctive position, if it is to enjoy other homage than that which must be always paid to its intrinsic truthfulness, its final triumph over the dangers to which it has been exposed by the ignorance and prejudices of its

teachers, will be secured by the scientific philology which has cleared away the obstructive suburbs, and has thus shown the fortress in its true and naked strength.

15 That philology, as the method of interpretation, is of essential importance to the protestant divine, is nearly self-evident. According to his principles, no theology can be true which does not rest upon a sound exposition of particular Books. He must therefore regard his system of divinity as merely a branch or application of philological science. That this is so, was the unanimous opinion of those old writers to whom all Protestants appeal as the foremost champions of their cause. Luther thought that true theology was merely an application of grammar*; Melancthon maintained that Scripture could not be understood theologically, unless it had been previously understood grammatically†; and Scaliger said with great truth, that ignorance of grammar was the cause of all religious differences‡. And not only so in regard to the exegesis from which the protestant theologian derives his practical doctrines. In his controversies also, he would do well to limit himself to the same safe criterion, and his triumphs would leave no room for a second fight, if, dismissing all perplexing references to the uncertain echoes of ecclesiastical tradition, he were content to employ no weapons save those of Biblical Criticism against adversaries who have raised a fabric of error on their misconception of the difference between *πέτρος* and *πέτρα*§. Nor is the tradition of

* "Lutherus—theologiam veram et summam nihil aliud esse quam grammaticam—h. e. Græcarum Hebraicarumque literarum scientiam—putabat." Ernesti *Opera Philol.* p. 199.

† "Melancthonis hoc dictum est: Scripturam non posse intelligi theologicæ, nisi antea sit intellectam grammaticæ." Ernesti *Op. Phil.* p. 223.

‡ "Utinam essem bonus Grammaticus; sufficit enim ei, qui omnes auctores probe intelligere vult, esse bonum grammaticum. Non aliunde dissidia in religione pendent, quam ab ignoratione grammaticæ." *Scaligerana*, *Prima*, p. 86.

§ *Matth.* xvi. 18. To those who argue for the pre-eminence of the Apostle Peter it is sufficient to refer to ver. 23 in this same chapter, which shows that the address has reference to his words and not to his person;

the Italian Church the only form in which an assumed infallibility is made a pretext for degrading the intellect of man, and contravening the instincts of conscientious morality. Protestantism has submitted to a tyranny even more revolting to our nobler aspirations than that of a Papal priesthood. And it has become a duty for laymen, no less than for professed theologians, to examine certain dogmas which are as prejudicial to true religion and as untenable in themselves as the theory of transubstantiation or the practice of indulgences*. But not to speak of the uses of philological criticism, it may be shown that

and the writer of the Apocalypse at all events considered the other Apostles equally foundation-stones of the Church (*Apoc.* xxi. 14; cf. *Ephes.* ii. 20). The linguistic argument of the Romanists, that in the original languages of Palestine “ista generis differentia quæ Græce et Latine est inter *Petrum* et *petram* non reperitur, sed uno eodemque nomine, sive Hebraice sive Syriace, Christus dixit: *הוּא כְּנֶסֶת יְעַל הָרֵא* *הוּא כְּנֶסֶת אֲבִינֵימָא לְעִירֵי*, *tu es petra, et super hanc petram ædificabo ecclesiam meam*” (*Maldonat. ad l.*), seems to be supported by the Syriac version, but will not stand the test of philological criticism; for *πέτρος* is a single stone, but *πέτρα* is a rock, considered as including many *πέτραι*, and this opposition is implied by the context; for otherwise he must have said *καὶ ἐπὶ σοί*. Moreover, in biblical Hebrew we have only the plural *בָּרִיָּם* “stones” in the signification of a rock, and the analogy of all the Scriptures shows that the rock on which the Church was to be built would be properly designated by *צִיָּר* and not by *בָּרִיָּא*. The fact that neither the Peshito nor Mr Cureton’s newly discovered Syriac version distinguishes between the “rock” and the “stone,” must be added to the arguments against the supposition that the Syriac New Testament has incorporated the lost Aramaic original of St Matthew’s Gospel.

* See a calm and dispassionate pamphlet, entitled *Free Theological Inquiry the Duty of the Laity*. Lond. 1858. Bunsen has well remarked (*Egypten* V, a, p. 52), that “a mere belief in authority, which is nothing but an unthinking, and therefore spiritually feeble acceptance of misunderstood traditions, must produce either a childish superstition, which destroys the childlike truth of that belief, or a denying and deadening incredulity, whether it speaks out honestly or hides itself behind the mask of hypocrisy.” He adds (p. 53): “It is almost more necessary to give a strong expression to this in protestant than it is in catholic countries. For the superstition, which the protestants practise with their Bible, in order to conceal their laziness and want of thought, is now employed to obtain the same object which was attained centuries ago in southern Europe—an absolute retrogression in the scientific study of the sacred records. Ignorance goes step for step along with perversity.”

linguistic ethnography contributes in no small measure towards establishing the grounds of Revelation. According to the theological system, which lays claim to exclusive orthodoxy, all the truth, or, at least, all the intelligibility of the Christian dispensation, depends on the derivation of the human race from one stock. If mankind had not a common origin, there must be branches of our race which have no more share in hereditary corruption or transmitted sin, than the supposed inhabitants of another planet. Now it is by philology alone that we can attempt to demonstrate the primeval unity of man. We are already so far advanced as to be able to divide all the known languages of the world into two main classes; and although we do not yet possess sufficient knowledge of the whole body of languages to be able to say what affinity exists between the two great divisions, approximations have been made to the conclusion that there are certain points in which they osculate; and, judging from the progress of linguistic studies hitherto, we may fairly hope that, as in the case of languages now known to be cognate, we were impressed with the differences long before we perceived the similarities which are now the most prominent features, so it will be hereafter with all the languages of the world; and investigation will fully confirm what the great Apostle proclaimed in the Areopagus, "that God has ordained that from one common parentage all the different tribes of men should spread themselves over the whole face of the earth, having determined the particular times of their successive emigrations, and the boundaries of their respective settlements*."

16 On the whole then it may be asserted, that philology is essential to a liberal education, and useful as a branch of science; that it is the great link which connects the past with the present, and the indispensable instrument of theological interpretation

* Ἐποίησέ τε ἐξ ἑνὸς αἵματος πᾶν ἔθνος ἀνθρώπων κατοικεῖν ἐπὶ πᾶν τὸ πρόσωπον τῆς γῆς, ὁρίσας προτεταγμένους καιροὺς καὶ τὰς ὁροθεσίας τῆς κατοικίας αὐτῶν (*Act. Apostol.* xvii. 26). Here it is clear that ἔποίησε is construed with the accus. and inf. as in *Matth.* v. 37, *Mark* vii. 37, and that the ἐξ ἑνὸς αἵματος is the main point in the passage. The other words indicate the manner in which ethnical distinctions really arose.

and criticism. We do not, however, maintain that every one should make himself a scientific philologist. In the first place, it is not every one who is qualified by capacity and taste to become a scholar: some particular faculties are needed for the successful study of dead languages, as well as for a profitable employment of one's time in the docks of London and Liverpool, or in the manufactories of Birmingham and Elberfeld: it is also a question of time, for no one can make himself acquainted with the wide range of subjects which philology in its scientific cultivation includes, so thoroughly and perfectly as to become a competent teacher of immediate learners, and, by his writings, of the world, without years of patient study and earnest thought; in a word, he must make philology his profession, and if his fellow-men set any value upon his labours he will live by this as he might by any other business. But in a civilized state of society every one ought to learn so much of philology, that is, he should have such an acquaintance with the vehicle of his thoughts, as may enable him to acquire a habit of method in the way of practical teaching. The mistake into which we have fallen in this country does not consist in our making classics and mathematics the basis of our education, nor even in obliging all to attempt what few can attain, but in making boys learn by rote like parrots instead of learning by reflexion like men. We repeat that man is a thinking being, and that his education as such consists in giving him a power and a habit of arranging his thoughts. The learning of Latin and Greek is profitable so far as it is made a lesson on the analogy of language; and we are convinced that the youth of this country would gain more from two years exercise in the rigorous discrimination of the like and unlike in the Greek language alone, than by spending ten years, as many do, in overloading their memory with a mass of crude facts, into the chaos of which the untutored intellect cannot penetrate. And, if any one's profession is to be that of a scholar, he will not be the longer in getting to the end of his journey because he has spent more time than some of his fellow-travellers in making himself thoroughly acquainted with the route.

We now proceed to inquire, what is the state of scholarship in reference to the objects which give it importance and value.

CHAPTER II.

THE HISTORY AND PRESENT STATE OF PHILOLOGY.

I. *Classical Philology*. 17 Origin and causes of philological studies. 18 Scholastic philosophy. Nominalism. 19 Oecham's grammatical logic. 20 Reformation connected with nominalism. 21 Revival of literature in Italy. 22 Invention of printing. 23 Progress of learning in Germany. 24 In France. 25 In England. 26 In Holland. 27 Progress of scholarship. 28 Bentley. 29 Modern German literature in connexion with scholarship. Heyne. F. A. Wolf and Niebuhr. Reiz. Buttmann and Hermann. K. O. Müller and Welcker. Schleiermacher and Savigny. 30 Merits and defects of German literature. 31 Verbal criticism in England. 32 Prospects of classical scholarship in this country. II. *Comparative Philology*. 33 It did not emanate from the old classical scholarship. 34 The true method of proceeding was first pointed out by Leibnitz. 35 Study of Zend and Sanscrit. 36 Sanscrit scholarship, and its connexion with comparative philology. Rask, Bopp and Grimm. William Humboldt and A. W. Schlegel. 37 Progress of comparative philology in England. F. Rosen. Prichard and Garnett. Prinsep and Rawlinson. III. *Combination of Classical Scholarship with Comparative Philology*. 38 Advantages which the former would derive from such a combination. 39 An application of the old classical and critical spirit would be not less advantageous for comparative philology. 40 Philological design of the present work; how far anticipated by Buttmann's *Lexilogus* and *Grammar*.

17 **T**O form a proper estimate of the present condition of philological knowledge, we should at least be acquainted with the circumstances in which the study originated, and with the principal changes which it has undergone up to our time. An adequate discussion of this subject would, however, far exceed the limits of an introductory chapter*. All that we propose to attempt in this place is first to point out, as briefly as possible, the more prominent and striking features that have marked the progress of those grammatical and critical studies which constitute our modern scholarship; then to indicate the rise and progress of comparative philology; and lastly to plead for a closer connexion between these two departments of linguistic study.

The importance, which, for the last three hundred years has been attached to philological studies, is at once accounted for and justified by that cessation of all literary exertion for a long

* For a more complete history of philology the reader is referred to a special article on the subject in the eighth edition of the *Encyclopædia Britannica*, Vol. xvii.

period, which ensued upon the overthrow of the Western Empire. The rude vigour of barbarism had triumphed over the languishing energies of civilization, and it seemed as if the last rays of mental culture had faded away in the prison of Boethius, as if some sudden paralysis had seized upon the general mind of Europe, as if men had drunk of the waters of oblivion, or had lost irrecoverably the key to those treasures of learning, wisdom, and genius, which the old world had amassed for their use. Rapid as was the downfall of literature, it must be recollected that many causes had been gradually operating to produce it, some of which continued their agency to prevent its revival. Among these not the least efficacious was the influence of the Romish Church, the subjection of the less cultivated laity to the growing power and greater intelligence of the clergy, and the prejudices which these last entertained, as well from motives of interest as from scruples of religion, against the learning of the heathen world; so that, after the crisis had taken place, the Church carefully appropriated to herself the little learning that still struggled for existence, and the papal authority was openly opposed to the diffusion of secular knowledge. Accordingly, when, notwithstanding this prostration of mental culture, the literary spirit revived after nearly a thousand years of darkness or doubtful light, and the mind, awaking like Epimenides from its long slumber, found all things altered but itself, men turned eagerly to the written monuments of the former waking and thinking world; and the grammatical studies necessary for the understanding of these works constituted that philology or scholarship which has ever since formed the basis of education.

As the Romish Church throve by the ignorance which it fostered, so it fell by means of the learning which it had always opposed. The causes which produced modern scholarship were identical with those which brought about the Reformation of religion. Of these the most important were the three following: the overthrow of the scholastic realism, and the introduction of rationalism, or a philological spirit, by the Nominalists; the reproduction of the classical authors in Italy, and the revival of the study of Greek, which created a learned class in Europe; and the invention of printing, which by multiplying books imparted to the bulk of the laity the effects of the two former

causes, the rationalism and learning of the thinking part of mankind.

It will be proper to make a few remarks on each of these causes.

18 The grammatical studies, which the Romans had borrowed from the Greeks, and which they had reduced to such an excellent system, were utterly lost in the dark ages. If one needed a proof of this, it would be sufficient to refer to the fact that the languages of those nations which had been most exposed to the influence of Roman literature, and which had for the most part adopted the Latin idiom, degenerated into a barbarous jargon without inflexions or syntax. A certain amount of education was necessary for the clergy, but, though *Grammatica* formed a part of the *trivium* in the seven arts which were then taught, this term did not signify rational grammar, but merely an acquaintance with the Latin of the schools. The nature, however, of some of the Romish doctrines necessitated a mixture of metaphysics with theology. In this mixture originated the scholastic philosophy, which was simply an attempt to prove, by what they knew of Aristotle's logic, the necessary union of reason and orthodoxy. It was only by such an instrument as the quasi-realism of their Aristotle, that they could establish those points of faith which constituted the difficulty of the Romish creed. It was necessary that the mere abstractions of common language should be considered as objective realities, for it was about these abstractions alone that they argued; and, as there were some clear-headed men among them who could not accept this position, there arose a dispute in the schools, of which the real point under discussion was, whether the scholastic philosophy had any authentic basis or not. This dispute is commonly known as the question about Universals, or the controversy between the Realists and the Nominalists; the former of whom considered universal ideas as pre-existent in the mind of God and man (*ante rem*), and the latter as simple abstractions of the understanding from the objects of the senses (*post rem*). Now as it was about the universals alone that the scholastics reasoned, it followed, that, if the universals were mere words, they could not pretend to establish anything by their argumentation, and consequently the whole system would be

overthrown. We can, therefore, easily understand why the nominalists were so violently persecuted, and why they were considered as little better than heretics; for, if orthodoxy rested upon scholastic realism, those who undermined the one contributed not a little to the downfall of the other. Roscelinus, the first opponent of the realists, went into the opposite extreme of ultra-nominalism*, and as he was confuted without much difficulty by Abelard and the other conceptualists, his efforts did not avail much to the overthrow of the system. It was reserved for our countryman, William of Occham, to effect this. Without running into any paradoxical absurdities, he showed in a straightforward manner that words are instruments of reasoning, not objects of science, and set up the grounds of rational grammar against realism, which had overlooked the fact that logic has nothing to do with the particular significations of words, but only with their methodical arrangement.

19 The Nominalism of Occham, however, was not merely a reassertion of grammar; it was an overthrow of that worship of words which was so important a part of the idolatry of the time. As it is one of the objects of this work to maintain the opinions which Occham advocated, both against the symbolical realism, which is still prevalent, and against the ultra-nominalism which now and then makes its appearance, we shall offer no apology for giving a statement of views so much in accordance with our own as his are; at the same time it is but due to the sturdy Franciscan, who is little thought about by the thousands who are reaping the benefit of his labours, to give as nearly as possible in his own words the important principles which he so opportunely revived, and by which he earned the titles bestowed upon him by his editor Marcus de Benevento—*logicorum acutissimus, sacræ scholæ invictissimorum Nominalium inceptor, in omni disciplinarum genere Doctor plusquam subtilis*. It will be sufficient to give the statements in his *Summa totius logicæ*

* We apply this term to the doctrines of those philosophers who, like Cratylus, Hobbes, and Horne Tooke, not only reduced universals to mere names, but even made truth to consist in names, for which reason Leibnitz has called Hobbes *plusquam nominalis*.

(*Venet.* 1522), one of the best of his works, and indeed as sound a treatise on the philosophy of syntax as any which has come to our knowledge. Arguments and syllogisms, says Occham, are made up of propositions, and these again of terms. Of terms there are three kinds, (1) that which is conceived, (2) that which is spoken, (3) that which is written: the last two are parts of a proposition meant to be heard by the bodily ear or seen by the bodily eye; the first is merely an intention of affection of the mind signifying or consignifying something as a part of a mental proposition*. We say that words are signs subordinated to the conceptions or intentions of the mind, not because, in the strict acceptation of the term "sign," words primarily and properly signify the actual conceptions, but because words are imposed to signify those very things which are signified by the conceptions of the mind: for the word signifies secondarily what is primarily signified by the conception, and is instituted to denote something implied by a conception, so that if the conception changes its meaning, the word would also change its meaning unless it were altered to suit the change in the conception. The intention, conception, or affection of the mind, is defined to be something in the mind naturally signifying something†. As writing is the secondary sign of speech, so speech in the secondary sign of the intention or conception, which is the primary sign of the thing signified as forming a part of a mental proposition, *which belongs to no particular idiom*‡. An intention is either primary or secondary: primary, when it is the mental representative of the thing signified; secondary, when it is a sign of such primary intentions: genus, species, &c. are secondary intentions§. With regard to universals, under which are included the five predicables, genus,

* Cap. i. fol. 2. *Terminus conceptus est intentio seu passio animæ aliquid naturaliter significans vel consignificans, nata esse pars propositionis mentalis.*

† Cap. xii. fol. 6. *Intentio animæ vocatur quoddam ens in anima natum significare aliquid.*

‡ *Propositio mentalis quæ nullius idiomatis est.*

§ *Stricte vocatur intentio prima nomen mentale natum pro suo significato supponere. Intentio autem secunda est illa quæ est signum talium intentionum primarum: cujusmodi sunt talis intentiones: genus, species &c.*

species, difference, property and accident, he adopts Avicenna's definition with the following explanation*:—an universal is a single intention of the mind made to be predicated of many, not for itself but for the things themselves, and because it is thus predicable of many it is called universal; but it is called singular because it is one form really existing in the mind. Of the arguments which Occham advances to prove that an universal is not a substance, it will be sufficient to mention one. This intention which we call an universal is a perfectly arbitrary sign, for this is the only thing that is predicable of many. Substance, however, cannot be thus predicated, otherwise a proposition would be composed of particular substances. Now a proposition is either mental, or spoken, or written. But these are not particular substances. Therefore no proposition can be composed of substances. They are however composed of universals. Therefore universals are not substances. Occham says the same of the categories or predicaments†, respecting which, in his important treatise *de Sacramento altaris*, he adopts the grammatical views of Joannes Damascenus. The ten predicaments, he says‡, are the most general signs, under which are included all mere words. For every word which can be placed at the end of a proposition, or employed in answering a question, may be arranged under some one predicament; for example, all words which make answer to the question "How much?" are placed in the predicament of *quantity*. And the words thus placed in the predicaments are not only *nouns*, but also *verbs*, and other parts of speech: and even phrases, such as prepositions with their cases. So that predicaments are only certain predicables and uncombined signs of things, out of which true or false combinations may be made.

* Cap. xiv. fol. 6, 2. *Vult dicere quod universale est intentio singularis ipsius animæ nata prædicare de pluribus non pro se sed pro ipsis rebus: ita quod per hoc quod ipsa nata est prædicari de pluribus, non pro se sed pro illis pluribus, illa dicitur universalis: propter hoc autem quod est una forma existens realiter in intellectu, dicitur singulare.*

† Cap. xli. fol. 13.

‡ *Tractatus Venerabilis Inceptoris Guilgelmi Ocham de Sacramento altaris*, Cap. xxxv. (This book is very scarce: our copy is a little black-letter duodecimo, without a date, but stated to be impressus Parisiis per Petrum Levet, impressorem.)

A difference of inflexion may make an irreconcilable difference of signification between two predicaments; for example, *angelus* cannot be *angeli*, nor *e converso*. He adds, that such predicaments are not merely arbitrary signs, but rather meanings or intentions of the mind, because they are signs naturally denoting objects; and as words may be distinct, notwithstanding the identity of the things signified, so meanings or intentions may be distinct, although the objects signified are identical. Thus the words substance, quality, and quantity, are not synonymous because they can be predicated of the same object.

20 It is obvious, from the way in which Occham speaks throughout his logic, that his object was to draw a strongly-marked line of distinction between the method of language, as the instrument of deduction, and the science or truth of things. By doing so he not only contributed to overthrow the scholastic theology, but also laid the foundation for that system of interpretation which became philology in the hands of the scholar: and therefore it was not without reason that Luther, who so well estimated the importance of grammatical studies to the ministers of his Reformation, paid so much attention to Occham while he despised and neglected the other schoolmen*. Indeed it appears from Luther's early works that he had embraced very heartily the Occhamistic nominalism†.

But the adoption of Occhamistic theology by the Reformers, whatever may have been its effect on the sacramental doctrines of Luther, or on the fate of scholastic dogmatism in general, is important to us principally as furnishing collateral testimony to the increasing influence at this period of that critical and rationalistic spirit, which is the essential characteristic of modern

* "Diu multumque legit scripta Occam; hujus acumen anteferebat Thomæ et Scoto." Melancthon, *Historia de vita et actis Lutheri*. Viteberg. 1545. fol. 5.

† Laurence (*Bampton Lectures*, Sermon III. note 6) after quoting Melancthon, *Op.* i. p. 414, *Loci Theol.* p. 113, says, "William of Occam here alluded to (an English Scholastic of great reputation) had been a peculiar favourite of Luther and Melancthon; the former styling him *carus magister meus*, and the latter *deliciæ quondam nostræ*." Ranke (*Hist. of Reform.* i. p. 310, Engl. Tr.) says, "Luther and Melancthon are the offspring of nominalism."

times*. To deprive words of their mysterious attributes, to rescue the mind from the thralldom of metaphors, and to subject every sentence to the fearless searching of the critical faculty, is the greatest triumph of iconoclastic reason, which has yet to celebrate the last of a long series of victories. This was the result in part effected by the early success of the nominalistic school.

21 The overthrow of the scholastic philosophy, however, and the proper cultivation of grammar, though good in themselves, would have had but little effect in dispelling the darkness of the middle ages, had it not been for the classical enthusiasm of the poet Petrarch, and the subsequent exertions of Poggio Bracciolini, who laboured incessantly, and to a certain extent successfully, in saving and bringing to light the remains of the great Latin writers. The increased study of pure Latinity, produced by the gradual diffusion of these books, naturally created a desire to become acquainted with the sister literature of ancient Greece, which the overthrow of the Eastern Empire by the Turks accidentally favoured; because those of the Greeks who had retained a knowledge of their ancestors' language hastened to Italy, where the patrons of learning offered them protection and reward. For some time, however, the number of Greek scholars was very limited, and nothing was done for scholarship beyond the translation of Greek authors into Latin, which, as the performers were mostly modern Greeks who were indifferently acquainted with Latin, and had but a traditional knowledge of the language of their ancestors, have little to recommend them beyond the merit of the attempt. But although the influence of the new learning was somewhat limited, still a beginning was made, a learned class was formed, comparisons were inevitably suggested between the enlightened views of the old world and the ignorance of the day, and the first seeds were sown of that

* Even the late Dr. Mill, the uncompromising advocate of "old paths," was willing to admit that the perfection of critical skill "is undoubtedly one of the real boasts of the later generations over the most intellectual and able of the ancient world" (*Four Sermons*, 1849, p. 114). With this admission, we need not wonder at the ill success of any attempts to restore the authority of a dry and scholastic dogmatism in our chief seat of learning and science.

freedom of inquiry which shook the papal throne and changed the tendencies of the world.

22 The third and greatest cause of the revival of letters was the invention of the art of printing, which, by the multiplication of books, spread the influences of revived learning over the whole of Europe, and, it is not too much to say, produced immediately and at one birth the Reformation and Philology. This invention is due to Germany or to the Low Countries; and though it must not be overlooked that its immediate effects and its application to the diffusion of classical learning were first felt in Italy, yet the origin of philology or sound scholarship is to be sought on this side of the Alps; its beginner was John Reuchlin (Capnio) a German (born in 1455, died in 1522); the two men who brought it forward most prominently and tangibly were William Budé (Budæus), a Frenchman, and Desiderius Erasmus, a Dutchman (both born in the year 1497); and while the combined influences of scholarship and printing, as far as they conduced to the overthrow of the papal system, were developed in Germany by Martin Luther (born in 1483, died in 1546), and by Philip Schwarzerde (Melancthon), a kinsman of Reuchlin (born in 1497, died in 1560), the more profound and speculative studies of Reuchlin in the later Jewish and Greek philosophy, in the occult sciences, and in the Cabalistic art, were prosecuted with great ability and learning, but with a growing consciousness of their futility, by Henry Cornelius Agrippa von Nettesheim (born in 1486, died in 1535), who, like Budæus and Erasmus, lived and died in communion with the Church, but, unlike them, was persecuted and reviled as a magician and conjurer*. Under the more immediate domination of the papal chair, and shrinking from German sway with all the aversion produced by their his-

* The character of this eminent man has been vindicated by Mr. Morley in his spirited and interesting book, *The Life of Henry Cornelius Agrippa von Nettesheim, Doctor and Knight, commonly known as a Magician*, London, 1856. It is to be regretted that the life of a scholar, written by a well-informed man, and derived from Latin authorities, should be deformed by such indications of laxity or carelessness (e. g. we have *litera humaniora!* in Vol. i. p. 64, and Gregory of Nazianzen, in Vol. i. p. 165).

torical recollections, the Italians were not likely to be affected by that free spirit of inquiry, which had been for some time at work among the Germans, and which seems to be still their natural characteristic. It was, however, to this free German spirit, and the materials furnished to it by the revival of letters in Italy and the invention of printing among themselves, that we are to attribute the great German Reformation. Luther himself has said as much*, and we see that, in the expression of their alarm at the probable effects of printing, the catholic hierarchy of the time had reference to Germany alone†.

23 Intimate, however, as was the connexion between the rise of philology and the Reformation, it cannot be denied that the country which gave birth to the latter was for many years afterwards far behind other countries of Europe in its cultivation of the former. Nor shall we wonder at this, when we recollect that all intelligent Germans who embraced the principles of the Reformation were absorbed in theological studies, and that in consequence of the religious differences which were produced by this engrossing change, Germany became one great battle-field, and was prevented from attaining to a full literary development till after the results of the thirty years' war had restored peace and tranquillity to the Protestants.

24 The connexion of France with Italy, in consequence of the ambitious projects of Charles VIII. and his successors Louis and Francis, made the former country an important instrument in the diffusion of the learning revived in the latter. The first approach to really accurate scholarship is due to Budæus (Budé) and the family of the Stephenses (Estienne), who brought the knowledge of Greek and Latin to a point of perfection which has induced many to believe that there was little more to be done by the modern scholar than to study the commentaries of the

* In his 239th letter (*Erster Theil*, p. 494, de Wette), where he talks of *Germanorum ferocia ingenia, quæ, nisi capta sint Scripturis et Ratione, non est vel multis Papis irritare tutum; præsertim hoc tempore, ubi in Germania regnant literæ et linguæ et sapere incipiunt Laici*.

† See the Proclamation of the Archbishop of Mainz in 1486, quoted by Hallam, *Literature of Europe*, Vol. i. p. 348.

former* and reprint the Thesaurus of Henry Stephens. Their successors, Casaubon and Salmasius, exhibit in their works an extent of reading and an accuracy of scholarship which few of our modern philologists can rival, and Joseph Justus Scaliger, who, though of Italian extraction, must be reckoned among the glories of French literature, may fairly be considered as still entitled to precedence above all scholars, Bentley, perhaps, excepted. Even Muretus, who was the most learned man in Italy at this time, was a French emigrant.

25 Our own country occupies a very distinguished place among the first nurseries of philology. Erasmus taught Greek at the University of Cambridge as early as 1510, and many of our native scholars were sought as instructors in Germany and elsewhere on the continent†. Roger Ascham, whose "School-master" was the earlist vindication of philological learning that appeared in a vernacular form, says in that work‡ that "good Mr. Redman§, and those two worthy stars of that University, Mr. Cheke|| and Mr. Smith¶ with their scholars, had brought Aristotle, Plato, Tully, and Demosthenes to flourish as notably in Cambridge as ever they did in Greece and in Italy: and for the doctrine of those four, the four pillars of learning, Cambridge then gave place to no University, neither in France, Spain, Germany, nor Italy." And long before any continental scholar had undertaken to explain in his mother tongue the classical language of ancient Rome, Sir Thomas Elyot of Jesus College,

* Porson intended at one time to re-edit the Commentaries of Budæus, with such additions and improvements as would make it serve as a manual for the Greek student.

† The fragmentary translation of the New Testament by Sir John Cheke, which has been published from the MS. (*Cambridge*, 1843), is a curious specimen of the accurate philology of the time. The controversy between the same writer and Stephen Gardiner on the pronunciation of Greek is also well worthy of notice (*Basileæ*, 1555).

‡ *Works*, ed. 1815, p. 304. See also his letter to Joannes Sturmius, *Familiares Epistolæ*, edit. Edvardi Grant, 1576, especially pp. 17 b, sqq.

§ Dr. John Redman or Redmayne, archdeacon of Taunton, and one of the compilers of the Liturgy.

|| Sir John Cheke, Tutor and Secretary of State to Edward VI.

¶ Sir Thomas Smith, Secretary of State to Queen Elizabeth.

Cambridge, had drawn up an excellent dictionary of Latin and English, and an Oxford school-master, Thomas Cooper, afterwards Bishop of Lincoln, so improved this work in successive editions, that it became equal in value and authority to the standard Lexicon of Robert Stephens, which was not similarly adapted to the use of French students*.

26 The noble demand of the citizens of Leyden, that an University might be established there as a reward for their heroic defence in 1574, led to the institution of many similar establishments in the country, and to the foundation of a school of philology, which in accurate knowledge and extensive reading soon left the rest of Europe far behind. Here it was that Scaliger, the great epochal scholar of the latter half of the 16th century, not only “laboured at restoring the work of Eusebius with the confident strength of genius and with boundless learning†,” and so laid the foundations of scientific chronology, but threw a new light on every field of philological research, and without dictionary or grammar mastered the minutest details of classical and oriental learning, leaving to his successors to gather up into sheaves the harvest, which he had reaped with the impatience of gigantic vigour, but had left lying on the ground‡. And although he was of Portuguese extraction, Benedict Spinoza was born at Amsterdam, and it was in Holland that he taught the principles of a philosophy which has influenced all subsequent speculations in metaphysics and theology§.

27 Whatever may be the merits of these different countries, the progress of scholarship was every where the same. At first the object of the learned was to publish as many of the Greek and

* See Mr. Mayor's paper in the *Journal of Philology*, March 1857, pp. 12 sqq.

† Niebuhr, *Hist. of Rome*, Vol. i. p. 243; see his remarks in note 660; and compare his *nachgelass. Schriften nicht philolog. Inhalts*, p. 141.

‡ See the list of Scaliger's works in the Biography of this great scholar by Jacob Bernays, Berlin, 1855, pp. 269—316.

§ His translator, Emile Saisset, has pointed out his importance, and Amand Saintes has called him “le fondateur de la philosophie moderne.”

Latin authors as they could collect, to supply the former with Latin versions, and both with such commentaries as might help the less perfect scholars to an understanding of the grammatical construction of the text, and the various allusions contained in it. To further this object collections of miscellanies or *variae lectiones*, as they were called, were from time to time published by different scholars. As grammatical knowledge advanced, the editors were induced to remark the corruptions of the texts, produced by the ignorance of those who had copied the manuscripts in the dark ages; and from this verbal criticism arose. But in all that was done for nearly a hundred years after the death of Scaliger, we perceive a want of method combined with much individual industry, nor do we discern any marks of commanding genius in the many who directed their attention to the elucidation and correction of ancient authors: they passed their time in polishing the ancient authors and abusing one another; and, like the rhapsodes of old, while they corrected their authors, they needed much emendation themselves*.

28 The real beginning of a more enlightened scholarship is due to Richard Bentley, whose unrivalled ingenuity and boundless learning enabled him not merely to correct the words of the ancient writers, but also to apply his intelligent criticism to the literary history and antiquities of Greece and Rome. His actual performances, and the example which he set to those who came after him, cannot be too highly estimated. Indeed, he may be regarded as the founder of historical philology†. In verbal criticism he found most able successors among his own countrymen: Dawes, Markland, Toup, Tyrwhitt, and Porson, who followed in his steps, have advanced this department of scholarship to its utmost limits. Meanwhile the scholars of Holland were not idle, and to them we owe a most accurate examination of the old Lexicographers and a collection of every thing that could contribute to the illustration of what they advance: besides, the

* *Τὸς μὲν γὰρ ῥαψωδὸς οἶδα τὰ μὲν ἔπη ἀκριβοῦντας, αὐτοὺς δὲ πάντῃ ῥηθιῶς ὄντας* (Xen. Mem. iv. 2, § 10).

† "Historical philology — the discovery of Bentley, and the heritage and glory of German scholars." Bunsen, *Egypt*, i. note 22.

first step in the systematic etymology of the Greek language was taken in that country, and, though the principles on which the undertaking was based were not sufficiently well founded, the attempt was not unproductive of benefit.

29 The Germans did not contribute much to the advancement of philology before the end of the seven years' war. Their general literary condition was very low, as may be inferred from the fact that the few great authors whom they had before this period, for instance Leibnitz, usually wrote either in Latin or French. When, however, they were released from the distractions of war and turned themselves in earnest to read and write, they showed that the active spirit which had made Germany the scene of the Reformation, was still alive among them, and they advanced with such giant steps that within a century they had placed themselves at the head of literary and learned Europe. About the middle of the 18th century Gesner and Ernesti came forward as prominent philologists in Germany, but their style of scholarship had little in common with that of their countrymen at the present day, being rather formed on the model of the Dutch school; indeed, the two most learned Germans of this time, Ruhnken and Drakenborch, confined the sphere of their usefulness to the Universities of Holland. The beginning of German, or, to use a more comprehensive but synonymous term, of modern scholarship, is to be referred to Lessing*, who created German literature by casting off the trammels

* See Stahr's *G. E. Lessing, sein Leben und seine Werke*, Berlin, 1858. A reviewer of this book in a weekly Journal has well remarked: "As all roads led to Rome, so must the historian of nearly every department of intellectual labour in Germany look back to Lessing. Who converted the Germans from an idolatrous worship of French classicism, and set them about the formation of a national literature? — Lessing. Who started that enthusiastic admiration for Shakspeare, that has gone on increasing till the present day? — Lessing. Who commenced that philosophy of art, that is such a peculiar emanation of the German mind? — Lessing. Who laid the foundation of that earnest tendency to free inquiry in matters of religion that is equally remote from old-fashioned orthodoxy and Voltairian levity? — Lessing. Who wrote the only German comedy that is considered classical? — Lessing. Who wrote the only poem in Germany that anybody cares to read for the

of the French school, and to Winckelmann, who laid the foundations of the archæology of art, a most important application of philology in the wider sense of the word. The successive appearance of the literary giants Wieland, Herder, Schiller, Göthe and Richter, who were all to a certain extent contemporaries, and the searching philosophy of Kant, which arose at the same time, furnished the active intellect of Germany with abundant materials for speculation; and the people became at once remarkable for bold theories and uncompromising inquisitiveness. This was not long without its effect upon scholarship, which, as we have said, existed among them as an offshoot of the Dutch school, and German philology properly so called arose with Heyne. The difference between him and his predecessors consisted mainly in this, that he did not limit his investigations to the narrower field of classical criticism, but combined with it all the newly applicable resources of the archæology of art, of the principles of taste, and of literature in general. In fact, the line of demarkation between literature and learning no longer existed for the Germans. We see this in the acknowledged influence of the translations of Voss, in the classical spirit which pervades all the great German writings, and indeed even in the adoption of classical metres for vernacular poems. The school which Heyne founded was combined with a revival of the Bentleian spirit in the person of F. A. Wolf, a man of the most purely literary genius that ever marched with the heavy baggage of book-learning. Whether he owed any thing to Vico or not, he must certainly be considered as the literary descendant of Bentley; and his treatise on Homer produced an effect upon scholarship analogous to that of the Dissertation on Phalaris. It is no disparagement to the undeniable genius and prodigious learning of Niebuhr to say, that the History of Rome, the master-work of historical criticism which will ever mark our age as distinguished in the annals of literature, is due in a great measure to

sake of its moral import? — Lessing.” It should not be forgotten that it is to Lessing that we owe the term *bibliolatry*, by which we stigmatize the degrading hypothesis of an infallible literature. For the sense in which he used the term, see his collected works (Berlin, 1839), Vol. xi. pp. 537, 538 sqq.

the example of Wolf; and we may join the illustrious historian of Rome in hailing him as the Hero and Eponymus of the race of German philologists*. But with all these wonderful extensions of the domain of philology the Germans were not inattentive to the details. F. W. Reiz, whose treatise on the Greek and Latin verb appeared in 1766†, laid the foundations of a rational method of grammatical criticism; his pupil Godfrey Hermann at the beginning of the present century published a little essay‡, which placed the study of Greek grammar in particular on an entirely new footing; Philip Buttmann, the first edition of whose Greek Grammar, published in 1782, was not much in advance of its forerunners, lived to make it a complete store-house of the facts and forms of the language, and to prove himself the most ingenious etymologer of the day; and the Dictionaries of Schneider and Passow constitute an epoch in the department of Lexicography. Lobeck has proved himself a worthy successor of Hemsterhuis and Ruhnken. The editions of classical authors published by Spalding, Heindorf, Böckh, Dissen and others, are a proof that the more enlarged views of the age have not been without their influence on the old system of note writing; and the overthrow which Hermann experienced some years since, in his opposition to the more extended views of Müller and Welcker, is a proof that philology has, in Germany at least, taken its place among the subjects of general literature. In addition to the causes enumerated above, a great and immediate influence is attributed§ to the new system of interpretation introduced by Schleiermacher, a most distinguished metaphysician and divine, who commenced at the beginning of this century a complete translation of Plato arranged according to a comprehensive view which he had taken of the general connexion of thought and mutual dependence of the separate dialogues: perhaps few German books are a better example of the influence of the

* *Rheinisches Museum* for 1827, p. 257 (*Phil. Mus.* 1. p. 176).

† *De temporibus et modis verbi Græci et Latini*, Lips. 1766.

‡ *De emendanda ratione Græcæ Gramm.* Pars 1. Lips. 1801.

§ See Dissen in Böckh's *Pindar*, Vol. III. p. 7; and Böckh himself says (*Abhandl. Berl. Akad.* 1822, 3, p. 264), "und ich will mich auch nicht rühmen es erfunden zu haben, da ich es von Schleiermacher gelernt habe."

general literary spirit on philology*. In other fields equally important advances were made. The connexion of philology with the study of the civil law produced a most striking effect on the latter, and a fortunate discovery of the fragments of Gaius has given an entirely new complexion to the history of Jurisprudence: in this department Savigny stands foremost as the greatest of lawyers and one of the greatest of philologers. But we should far exceed our limits were we to particularize the different German authors who have written first-rate books on mythology, geography, or art. Suffice it to say, that by the exertions of the Germans alone, philology has made more progress in the last fifty years than in the preceding two hundred.

30 It was not, however, to be expected that such a sudden advance should be made without some corresponding disadvantages. And here we may be permitted to make a few general remarks on the merits and defects of German literature. The merits of the German writers may be inferred from what we have already said. They have a large share of originality; great honesty and consistency of purpose in the maintenance of their own opinions; indefatigable industry; and an entire freedom from prejudices and one-sided views. Their defects, so far as they are constitutional, arise from the excess of those qualities which constitute their chief merit: they are liable to give way too much to their imaginative enthusiasm; like the student Anselmus, in Hoffmann's tale†, they are fascinated by the dark-blue eyes in the elder-bush, and the crystal bells are ever sounding in their ears. The circumstances under which their literature so rapidly created itself have also produced their evils: every young man who has any pretensions to learning or ability, feels himself called upon to write something novel; the result of which is, that without sufficient sobriety of mind to keep them from error, their disposition leads them continually to make rash attempts upon subjects which ought never to be treated without the greatest care and circumspection, so that they have given much scandal to people of more timid minds, and created preju-

* See the *Journal of Education*, Vol. ix. pp. 118 foll.

† *Der goldne Topf*.

dices against that freedom of investigation, which, when soberly exercised, is at once the most imperative duty and the highest privilege of civilized and educated men. There is perhaps no literature in the world which furnishes so decided, so strongly marked a contrast as the German does between the first- and second-rate authors: which, while it presents to us more of the true and the valuable, more that is kindled into sunlike splendour by the fire of genius, more that is arrayed in the secure panoply of learning, more that is dressed in the gay but not inelegant trappings of a rich and luxurious fancy, can yet on the other hand display so much frigid pomposity, so much flippant ignorance, and such audacious dulness. True it is we have but few of the first class among our writers: but then how very few we have of the second. The same principle of cautious reserve or of a persevering pursuit after the profitable, which has doomed to the desert air many a glowing thought and many a golden truth, has also saved us from sundry proofs of the danger of trying to be ingenious, and has deterred many a literary Curtius from leaping into the gulph, ever open in the forum to swallow up those whose destiny it is to write and be forgotten. Another feature in the German literary character is the air of consciousness and pretence with which the great bulk of writers bring forth their works. The mark of real originality is, that the author is before his age. The great writer, through his own modesty, is generally the last to discover this, or, perhaps, through the tardy appreciation of his contemporaries he is left in ignorance of the noble service he has done. Like Spenser's Chrysogone, he has unawares conceived and borne children of the sun, and they lie unheeded by the parent's side in some rude wilderness untrodden by men, till the goddess of Beauty claims them for her own and rears them in her own fair garden, that they may hereafter delight and instruct mankind*. The Germans, on the contrary, make an exhibition of their genius, and do not scruple by themselves or their friends to point out, to those who might fail to discover it, the value of their wares. There is perhaps no other country in which the intercourse of literary men is so much a commerce of compliments, and where

* *Faerie Queen*, Book III. Cant. 6.

friendship is so likely to cool whenever it is not fed with the fuel of commendation*. An excessive love of applause, when gratified, is apt to generate a self-complacent indifference to the merits of foreign labourers in the same field; and when we consider the almost extravagant commendation which is bestowed upon German learning in this country, it may seem the less surprising that the Professors of Berlin and Leipzig should never take the trouble to inquire whether they are not bestowing their industry on some investigation to which the acuteness of English scholars has already been successfully applied†. This habit of ignoring the works of contemporary writers in another country assumes the form of a grave moral obliquity, when it is traceable, as it is in certain instances, to a wish, on the part of some German philologist, to conceal his obligations to an English labourer in the same field‡. It is the inevitable result of these arrogant pretensions, that the professed scholar in Germany will

* This was the case with Wieland and Jacobi. Wolf's ill treatment of his friend and pupil Heindorf may be traced to wounded vanity; see Schleiermacher's *Werke: Philosoph.* i. 697 sqq.

† These remarks were made with a general reference; but some special illustrations will be found below, § 370, and in the present author's essay on *Classical Scholarship and Classical Learning*, pp. 232 sqq. An eminent German professor lately told a learned friend of ours that he had not thought it worth while to look at Grote's *History of Greece*, because he took it for granted that it was entirely borrowed from German writers on the subject!

‡ The most painful example of this international plagiarism is furnished by the Semitic scholar, Henry Ewald. There is no one in Germany who has written more contemptuously of English learning than this orientalist. In fact, our miserable inferiority to the Germans is his favourite theme. And yet he has been unable to defend himself successfully from the charge, brought against him by the late Dr. Samuel Lee, of having intentionally concealed his obligations to the Hebrew Grammar of an Englishman, who, at the instance of Gesenius, had received from a German university the greatest compliment that could have been bestowed on a foreigner (see Dr. Lee's *Examination of Ewald's Grammatical Principles*, London, 1847). Not contented with assuming the position of a dictator in regard to Semitic literature, Ewald has undertaken to set us right in Greek criticism. Of his competency to write on this subject, it is unnecessary to say more than that he translates ἀπειδυσάμενος in Col. ii. 15, as if it had been written ἀπειδύσας! (*Send-schreiben d. Ap. Paulus*, Götting, 1857, ad loc.).

never acknowledge his errors: his reputation for infallibility is dearer to him than the truth; and while he receives even the fairest criticisms with an impatient irritation, which not unfrequently explodes in an outbreak of insolence, he sometimes endeavours to sustain his untenable position or to cover his defeat by audacious misstatements or disingenuous sophistry*. These, is must be confessed, are serious drawbacks. Nevertheless, all honour be to the Germans, for they have made the mind of Europe what it is; and, though much that many a one of them has written is neither wise nor true, though now and then we may meet with something which startles us even in the pages of the wisest and most true-hearted among them, yet let all those who love knowledge and admire genius apply themselves diligently to the treasures of German literature and scholarship, with caution indeed lest they mistake dross for gold, but yet with earnestness of purpose and with full confidence that if they seek aright they will not be disappointed.

31 The names of the verbal critics who succeeded Bentley in this country have been already mentioned: in their performances is included all that was done by Englishmen for the scholarship of the eighteenth century. The very limited nature of the instructions given at the classical schools at that time, and the insufficient learning of the masters, necessitated some arbitrary method of employing the ten years which it was thought right to spend upon Latin and Greek. The principle of competition which was introduced very early in this country, and the facility of determining the relative merits of such exercises, induced the masters of the schools to direct their attention

* A slight specimen of the manner in which Germans answer criticisms, may be seen in some of Bunsen's recalcitrations (e. g. in the preface to the last volume of his *Ægypten*, pp. v sqq.) Although Bunsen lived in England, he did not consider himself bound to acknowledge his obligations to Englishmen. At least he did not tell us, that the true opinion, that Hippolytus wrote the book on heresies attributed to Origen, was suggested to himself by Dr. John Barrow of Oxford. In our own department Hermann used to praise Elmsley for his candour and his willingness to admit his mistakes; but when did he follow the good example which he commended?

principally to the composition of Latin and Greek verses, which had been the amusement of scholars at the revival of learning; or perhaps the custom was derived immediately from these early scholars together with the grammars which long maintained their place in our principal schools. The effect of this narrow range of reading was to incapacitate our scholars from making any real advances in philology, while the great facility of verse-making, which every one brought up to the University with him, was a very good preparative for the application of verbal criticism to the correction of the ancient poets. Hence we find that, in knowledge of the old metres, and in conjectural emendation, the scholars of this country were always infinitely superior even to the most learned of their continental contemporaries. The last great scholar of this class was Porson, who was indeed a man of very decided genius, and, though he lost himself in trifles unworthy of his power, it must be admitted that, in the little which he directly contributed to Greek learning, he showed a knowledge of the language in all its details, to an extent which can hardly be surpassed. The great mischief of which he is guilty was not so much in omitting to do all that he might have done, though this is deeply to be regretted, but in investing with exclusive importance a merely subordinate branch of Greek philology, and thus creating a school of criticism in England which has stood seriously in the way of our philological progress.

32 At the termination of the war with Napoleon a very great change took place in the intellectual state of the better classes in this country. Excluded as we had been, more completely than at any former time, from all intercourse with the continent, we were suddenly seized with a passion for foreign travelling; Englishmen were to be met with in every corner of the world; an acquaintance with other languages was no longer thought wonderful; and in the process of time many returned home impressed with the novel conviction that there was something good out of England. This influence of foreign intercourse was felt latest in its effect upon classical scholarship; the prejudice against German scholars, which Porson's quarrel with Hermann had produced, and his authority with his imitators, kept us for some years after the peace in the same state as before it,

and the pert mediocrity of the *Museum Criticum* was the only representative of our philology; some of Porson's successors, especially Elmsley, were able critics, and accurate correctors of minutiae, but not philologists. At length, in 1819, Mr. Valentine Blomfield's translation of Matthiæ's Greek Grammar made its appearance, and its great superiority to anything of the kind which we had in England soon recommended it to general use; this work and the German editions of classical authors, which were now imported in considerable numbers, began to wean us from our unreasonable prejudices against the scholarship of other countries. In 1824 appeared the first part of Mr. Clinton's *Fasti Hellenici*, the most important work which had been published in this country since Bentley's time; and the number of editions of classical works, variorum editions, reprints of old lexicons, &c. which appeared about this time, were a sufficient proof of a reviving spirit of philology. The most important services, however, were performed by the almost simultaneous appearance of translations of Niebuhr's *History of Rome*, of Böckh's *Public Economy of Athens*, and of Müller's *Treatise on the Dorians*. In fact, English scholarship became every day more and more *germanized*, to such an extent that our philologists hardly dared think for themselves. Gradually, however, the characteristic elements of the English mind have asserted themselves, in this as in other departments; and our apprenticeship to German philology has ended in producing a number of original workmen at least equal to the majority of those in whose school they have been trained. In some of the highest applications of scholarship we should impartially prefer the English to the German expositor; and books have been published in this country during the last twenty years, which stand in favourable contrast to any continental works on the same subject*. Although Dr. Arnold's edition of Thucydides, of which the first volume appeared in 1830, was not distinguished by profound or even very accurate learning, we believe that the manly tone in which the notes are written, and the large and unprejudiced views which they manifest, and which were never seen in any former commentary on

* We may mention particularly *The Egypt of Herodotus: with notes and preliminary dissertations*, by John Kenrick, M. A. London, 1841.

an ancient author, produced a most beneficial influence on classical literature in general. The two periodicals which were established shortly afterwards, — the *Journal of Education* and the *Philological Museum* — at least gave indications of the fact that a truer scholarship, a more comprehensive criticism, and more extended views of general literature, were beginning to supersede the meagre, one-sided notions of a few years before. And if we must pronounce an opinion with regard to the prospects of British philology at present, we must needs confess that they are far from discouraging, and that, although there is still much to be done before we can say, that the educational and literary results of our philological training are accurately and fairly balanced, and that the scholarship, which has always been the distinguishing mark of the English gentleman, has uniformly developed itself, whenever the occasion has arisen, into the learning, which is too often supposed to have been exclusively appropriated by the German professor, there is every reason to hope that the labourers will not long be wanting; and that while we shall retain the practical skill, which is calculated to produce such important effects on the moral and intellectual character of our younger students, we shall be able fully to meet the increasing demand for a larger amount of comprehensive and scientific knowledge. When two statesmen, who have held in succession the office of Minister of Finance in this great commercial country*, have found time in the midst of their political avocations to discuss with an overflowing abundance of erudition the early history of Rome and the first beginning of Greek poetry, there is little ground for the apprehension that classical philology will not be duly prosecuted by those, who, as teachers or writers, have undertaken professionally to expound the dead languages and the literature to which they are the key. Enlightened and accomplished scholars have been placed at the head of all our great schools, so that the stumbling-blocks of prejudice are no longer to be dreaded in that quarter; the Universities, it is well known, have never opposed themselves to any necessary change in the method or extent for their classical studies; and in the recent histories of Greece and Rome, which

* Sir G. C. Lewis and Mr. W. E. Gladstone.

have been completed or commenced in this country*, and which will mark this epoch in the annals of our philology, we may clearly discern what may be expected from an union of the multifarious learning and chastened scepticism of the better class of German scholars with the good taste, sober judgment, and straight-forwardness for which this country is so eminently distinguished.

33 While classical scholarship has been making this progress in England and on the continent, a new branch of philology has grown up by its side, and is now so matured as to be entitled to a place among its primary elements. This is the comparative study of languages, which, while it also serves as an important instrument in the investigations of ethnography and early history, seems likely to engross the whole grammatical element of the older philology. It is curious to trace this study back to the time when the first glimmerings of light broke upon the scholars of Europe, when they first saw the little blue flame which pointed out to them the treasures still in the mine. It must be admitted, in the first place, that classical scholarship can claim no share in the first production of the comparative grammar, which is now its most important adjunct. Theology was the original, though not perhaps the voluntary cause of this important addition to human knowledge. Linguistic science began† in the examination of the claims of various dialects to be considered as the original language of the world; and the oldest collections of materials for the erection of this new superstructure were made by Propagandas and Bible Societies. Most of the earliest inquirers favoured the pretensions of the Hebrew, and, as they proceeded by derivation rather than by comparison, they were obliged to have recourse to a number of very forced etymologies in endeavouring to establish the affiliation of the

* By Dr. Thirlwall, Mr. Grote, Mr. Malden, Dr. Arnold, Mr. Donne, and Mr. Merivale.

† Dr. Wiseman has given a brief history of comparative philology in his first and second lectures. Those who wish for further information may consult Dorn, *über die Verwandtschaft des persischen, germanischen und griechisch-lateinischen Sprachstammes*, pp. 91 sqq., and Pott, in Ersch und Gruber's *Encyclop. s. v. Indo-Germanischer Sprachstamm*, pp. 6 sqq.

European languages to a Semitic mother. Even when they perceived the connexion between sundry of the Asiatic and European members of the Indo-Germanic family*, as when Lipsius in 1599† or Salmasius in 1643‡ made a comparison of modern Persian with German and Greek, they were utterly unable, from the want of a wider induction, to see the important conclusions to which such comparisons might lead, nor indeed had they any fixed principles to guide them in their search.

34 The first who pointed out the true method of proceeding was Leibnitz, whose comprehensive genius seems to have suggested the beginning of almost every improvement in science. This great man saw that the Hebrew had no claim to be considered as the mother of languages; he showed that we must take the widest possible inductions, and compare with one another the languages of nations most remote in geographical position, and that the words to be selected for comparison were the most simple and necessary terms in each language§; in fact, he pointed out the course by pursuing which succeeding philologists have realized most of the hopes which he entertained.

35 But, although the right method was thus suggested, nothing of any great importance was performed till the discovery of the Sanscrit or sacred language of India. The spirited researches of Anquetil du Perron, about the middle of the last century, had introduced a knowledge of the old languages of Persia, the Zend and the Pehlvi, into Europe; but, though it has since been established that the Zend is but a variety of the Sanscrit, no attempt was made to connect the study of Zend

* It has been erroneously supposed (Camden, *Britannia*, p. 123; Wilkins in *Chamberlayn. orat. domin.* p. 7) that Joseph Scaliger was the first to notice the resemblance of Persian and German; but although he could not help observing the identity of some very common words in the two languages, he was far from thinking this an argument for a sameness of origin (*Epistol.* p. 489). If any one preceded Lipsius, it must have been Pontanus, but we are not acquainted with his writings.

† In a letter to Schott (*Lipsi Opp.* Vol. i. pp. 282 sqq. Edit. 1613).

‡ *De lingua Hellenistica Commentarius*, pp. 331 sqq.

§ *Otium Hannoveranum*, p. 80; *Collectanea Etymologica et Meditationes de Originibus Gentium* (passim); *Commerc. Epist.* Vol. iii. p. 79; *Nouveaux Essais sur l'Entendement Humain*, pp. 236 sqq.

with philological researches. Anquetil du Perron himself was no scholar, and people were much busier in endeavouring to settle the claims of the Zend to be at all considered as a language than to profit by it. In the year 1765, however, the treaty of Allahabad made the East India Company sovereigns of Bengal, and their first proconsul, Warren Hastings, calling in the assistance of some Brahmins, drew up an epitome of the native laws, by which the new rulers had resolved to govern their subjects. In the preface to this book, which was translated into English through the Persian, and was published in London in 1776, with the title *Code of Gentoo Law*, Mr. Halhed, the editor, gave at second-hand the earliest account which had appeared in Europe of the Sanscrit language, the original vehicle of these laws. Two years after the appearance of this book, Mr. Halhed published at Hoogly his *Bengal Grammar*, in the preface to which he remarks (p. iii), "I have been astonished to find the similitude of Sanscrit words with those of Persian and Arabic, and even of Latin and Greek: and these not in technical and metaphorical terms, which the mutation of refined arts and improved manners might have occasionally introduced; but in the main ground-work of language, in monosyllables, in the names of numbers, and the appellations of such things as would be first discriminated on the immediate dawn of civilization." These remarks were followed up and confirmed by Sir William Jones and Sir C. Wilkens, the latter of whom translated the *Bhagavad-gita* in 1785, and the *Hitôpadêça* in 1787, and the former, besides other services, awakened a European interest in Indian literature by his translation of the *Sakuntalâ* in 1789. A German Missionary, named John Philip Werdin, but more commonly known as the Pater Paulinus a Sancto Bartholomæo, deserves the credit of being the first to publish Sanskrit books in Europe, and to make a formal comparison of the Zend and Sanscrit with the German and Latin; but as he had only a vague acquaintance with the Sanscrit, and did not print his books in the *Dêvanâgarî* or Sanscrit character, he can hardly be said to have been the founder of Sanscrit philology in Europe*.

* Werdin heaped all kinds of abuse upon our Calcutta scholars, and therefore has been somewhat roughly handled by them. Dr. Leyden says

36 The real beginning of this study is due to our countrymen in India, who acquired a thorough and critical knowledge of the language from the native Pandits, and made it by their writings accessible to European students. In the first rank of these stand the two pioneers whom we have already mentioned, Sir William Jones, the founder of the Asiatic Society at Calcutta, and Sir Charles Wilkins, the first who translated Sanscrit books, and printed Sanscrit in Europe, and the author of an excellent Sanscrit Grammar*; and the work was completed by two other Englishmen, distinguished alike by their abilities and their industry: Mr. Colebrooke, the author of the first good Sanscrit Grammar, the beginner of Sanscrit Lexicography (by his admirable edition of the *Amara Cōsha*), and, in fact, the Scaliger of Sanscrit scholarship; and Professor Wilson, the compiler of the great Sanscrit Dictionary. From England the knowledge of this language passed into Germany. Frederick Schlegel, who visited this country during the peace of Amiens, learned a smattering of Sanscrit from Mr. Hamilton (afterwards Buchanan), an English officer who was detained as a prisoner of war in France; and he subsequently gained further instruction from M. Langlès, at Paris, where, since Anquetil du Perron's time, the Asiatic languages had been cultivated with some success, and where the

(*Asiatic Researches*, Vol. x. p. 278), "his *Vyacarana, seu locupletissima Sanscriticæ linguæ Institutio*, Romæ, 1804, has given a death-blow to his vaunted pretensions to profound oriental learning; and shown, as was previously suspected, that he was incapable of accurately distinguishing Sanscrit from the vernacular languages of India." And Professor Wilson has pointed out the ludicrous fact that he mistook the *Amara-Cōsha*, a common Sanscrit vocabulary, for a ritual and liturgy coexistent with the origin of the Hindu Idolatry and the basis of the Brahmanical superstitions (Preface to Sanscrit Dictionary, 1st edition, p. 22).

* The Edinburgh reviewer of this grammar (Vol. XIII.) deserves the credit of being one of the very first of our countrymen who perceived the extensive affinities of the Sanscrit: he has given a comparative table of Sanscrit, Persian, Latin, and German, which at once established the common origin of these languages. It is an interesting fact that the great Edmund Burke had paid considerable attention to the filiation of languages long before the study of Sanscrit became known in Europe. See Bisset's *Life of Burke*, II. pp. 390, 1. Prior's *do.* p. 427: quoted by Buckle, *Civilization in England*, p. 415.

old language of Persia has been submitted to an analysis as exact and scientific as that which has elucidated the history and explained the structure of the other Indo-Germanic idioms*. The little work on "the Language and Wisdom of the Indians," which F. Schlegel published in the same year with Colebrooke's *Amara-Côsha* and Wilkins's Grammar, was the first to awaken the Germans to a sense of the value of these studies. The mere knowledge of Sanscrit, however, would not have been sufficient to create or even to suggest the comparative philology of the present generation. Polyglot-collections of *Pater-nosters* furnished but scanty materials for a wide induction; and though the *Mithridates* of Adelung and Vater undoubtedly contributed to awaken a taste for linguistic studies, little advance would have been made in the right direction had not some men of genius turned their attention to the great capabilities of this untried field of speculation. The establishment of Sanscrit scholarship as a branch of European philology is due to Francis Bopp and Augustus William Schlegel. By the exertions of these two scholars, seconded in no slight degree by the illustrious William Humboldt, a sound and accurate knowledge of the Sanscrit language has been introduced into Germany; and Schlegel, in particular, brought to the study of the old Indian poems the truly literary spirit and the highly-finished taste, which are so conspicuous in his celebrated lectures on the drama and in his inimitable translation of Shakspeare. The interest which the study of Sanscrit has created in Germany results entirely from the greater diffusion of philology in that country; and a wonderful impulse to the study of comparative grammar had been given by Rasmus Rask's treatises on the origin and affinities of the Scandinavian and Teutonic idioms, and by the subsequent publication of James Grimm's *Deutsche Grammatik*†, by far the most important book of the kind which has made its appearance since the revival of letters. William Humboldt's posthumous work on the Kawi dialect

* We allude to M. Eugène Burnouf's most meritorious labours in editing and explaining the fragments attributed to Zoroaster.

† Grimm's last work (*Gesch. der deutschen Sprache*, Leipzig, 1848) contains in its ethnographical department some very ingenious and learned combinations. But the purely philological chapters appear to us singularly deficient in critical discrimination.

applies the results of a truly comprehensive survey of human speech to the solution of the most important problems respecting the origin of language. And at an earlier period, Raynouard had shown, in his scientific examination of the Romance languages, the causes which lead to the disorganization of grammatical structures. By means of these masterpieces of philological criticism, and of Bopp's numerous writings, to the efficacy of which the subsidiary or subsequent researches of Pott, Eugène Burnouf, Lassen, Lepsius, Diez, Diefenbach, Zeuss, Weber and Max Müller, each working diligently in his own field, have in no slight degree contributed, comparative philology has been raised to the rank of a science, the mechanism of the different branches of the Indo-Germanic family has been investigated and explained, the pedigree of the various dialects included in it has been enrolled, and their written monuments have been rendered accessible and intelligible by the application of the sound criticism created and fostered by the classical studies of Europe.

37 In the first beginnings of this new branch of inductive science, England, we are sorry to say, did little that will bear comparison with the performances of our continental neighbours, in regard either to comparative philology in general, or to Indian scholarship in particular. Indeed, with the exception of the great Colebrooke and Sir Graves Haughton, no one of our Sanscrit scholars can be called a philologist in the higher sense of the word, and even these eminent orientalists have confined their attention to the languages of Asia. Accordingly, as we borrowed our philology in its literary spirit from the Germans, we were compelled to import also the raw materials at least of their comparative grammar. But when the good work had once commenced amongst us, our philology made very rapid progress, and we can point to conceptions more original, and to results more important, than any which have signalized the efforts of the learned elsewhere. It is not to be denied that we had great advantages at starting, and that it would have been very disgraceful if we had not learned to profit by them. Bopp's System, which appeared in its first outlines in 1816*, was pub-

* *Conjugationssystem der Sanskritsprache*, Frankf. 1816.

lished four years afterwards in an English journal*, and one of his most able and distinguished pupils, the late Dr. Rosen, became naturalized among us, as Professor of Sanscrit in University College, London, more than thirty years ago, and so consecrated his learning and abilities to the service of our philology. It is difficult to estimate the loss which learning in general sustained in the too early death of this admirable person: but we must not forget that we really owe to him indirectly the first application of comparative philology to the public teaching of the classical languages, a merit which has been too eagerly claimed for and too readily conceded to the Greek and Latin Professors, who merely transmitted to their pupils the ideas and information which they had derived from their German colleague, and who, in the long period, more than a quarter of a century, which has since then elapsed, have not proved themselves capable of building on the foundation which he had laid. The same influence was soon conspicuous in the pages of the *Penny Cyclopædia*, to which Dr. Rosen was himself a frequent contributor, and which owes its decidedly philological character to writers more or less connected with the London University. Independently, however, of this immediate relation to Bopp's philological school, there appeared, about the same time, two writers whose services to philology have been of the utmost value. Dr. Prichard, who may be regarded as almost the founder of the Science of Ethnography, was not long in perceiving the important aid which his favourite speculations might derive from a consideration of the affinities of language. He made no insignificant contribution to pure philology in his vindication of the claim of the Celtic languages to a place in the great Indo-Germanic family†; and in his *Natural History of*

* *Annals of Oriental Literature*, Vol. i. London, 1820.

† *The Eastern Origin of the Celtic Nations*, London, 1831. Although we think that Dr. Prichard has on the whole proved his point, we must take the liberty of saying, that his little book shows a great want of philological exactitude. He has not attempted to distinguish between those words which the ancient Britons might have derived from the Roman conquerors, or from the Anglo-Saxons who subsequently established themselves in the island, and those which must have belonged to the Celtic dialect from the first. Accordingly, many of his instances, where they are merely comparisons of Celtic with the Latin, or with the German

Man, and other works, he has done a great deal towards classifying and grouping the varieties of human speech. The late Mr. Garnett, whose comprehensive and truly philosophical analysis of the constituent elements of language was first made known in a notice of Dr. Prichard's Celtic work*, developed his views in various contributions to the records of the *London Philological Society*; and we do not know where to look for sounder or more instructive examples of linguistic research†. In regard to palæography also, English scholarship may claim the honour of having made the first and most important, or the last and most complete discoveries. Young guided Champollion to that systematic examination of the Egyptian hieroglyphics, which, in the hands of Schwartz, Bunsen, and Lepsius, has produced, and is still producing, such important results for comparative grammar, chronology, and historical criticism‡. James Prinsep, by his unaided industry and acuteness, first discovered the clue to the two alphabets in which the Buddhist Inscriptions of Açoka are written, and thus opened the way to safe and important investigations respecting the development of the old languages of India§. Sir H. Rawlinson, with the in-

dialects, prove nothing; his strong point is the comparison with Greek and Sanscrit, and his analysis of the pronouns and inflexions; but of these particulars a further and more accurate examination has been undertaken by Zeuss and others.

* *Quarterly Review*, Vol. LVII. *Essays*, pp. 111 sqq.

† The *Philological Essays* of this accomplished and able man have been published in a collected form by his son (London, 1859). The student of comparative philology will find in this volume a most scientific analysis of inflected language illustrated by the happiest applications of critical skill and ingenuity.

‡ Many English writers have made valuable contributions to the details of the important subject of Egyptology; e. g. Mr. Osborn, Dr. Hincks, Sir G. Wilkinson, Mr. Birch, and Mr. Sharpe. Nor must we omit to mention the labours of Mr. G. R. Gliddon, who has made the wonders of ancient Egypt familiar to our brethren in the United States of America: see *Otia Ægyptiaca: Discourses on Egyptian Archæology and Hieroglyphical Discoveries*. London, 1849.

§ See the recognition of his merits in Lassen's *Indische Alterthumskunde*, II. p. 222; and in Weber's *Indische Skizzen*, pp. 25, 130. Prinsep's remains have been very ably edited by Mr. Edward Thomas (*Essays on Indian Antiquities, by the late James Prinsep*. London, 1858, 2 Vols. 8vo.)

telligent aid of Mr. Norris, has decyphered and translated the contemporaneous records of the first Darius, and the same industry and acuteness will probably extract historical truth from the cuneiform chronicles which the enterprise and indefatigable zeal of Mr. Layard have brought from the ruins of Nineveh. To come nearer home, Mr. Kemble and Mr. Thorpe have prosecuted the study of Anglo-Saxon philology with no less devotion than Grimm. Mr. Kemble, in particular, formally enounced the leading principles of comparative philology in his lectures on the history of the English language, delivered before the University of Cambridge in 1834; and has since published more than one original work indicating the depth and extent of his acquaintance with Teutonic lore. Dr. Bosworth also has connected his Anglo-Saxon researches with comprehensive investigations in general philology, and Dr. Latham, who had first distinguished himself in this field, especially by the publication of a treatise on the English language, has since become very generally known as a collector of philological facts, mainly with reference to the languages of Africa. When we look to the activity of the Asiatic, Geographical, Philological, and Syro-Arabian societies in this country, to various publications which appear from time to time*, and to the effects which may be expected from the adoption of ethnographic philology by the British Association, we cannot allow ourselves to entertain any fears respecting the successful cultivation of linguistic science in this country.

38 From this survey it will easily be seen what is the condition of scholarship in reference to the higher objects and more extensive applications of which we have spoken in the preceding chapter. To these we need not return: but it is desirable that we should inquire, whether the knowledge which we have recently

* We ought particularly to mention the late Mr. Winning's *Manual of Comparative Philology*, London, 1838. The first and second parts of this work, which are composed, in a great measure, of well-selected extracts and translations from other writers, with intelligent criticisms on their opinions, are worthy of almost unqualified approbation. The third part is rather at variance with the other two, and is deformed by references to Rabbinical authorities, on which we do not set the slightest value.

gained with regard to language in general, and the Indo-Germanic family of languages in particular, may not now be applied by the classical scholar in gaining a more correct insight into the structure of the Greek language, in classifying more accurately its grammatical forms, and in interpreting more satisfactorily the authors who have written in it. To this inquiry we may add another: whether the general study of comparative grammar as applied to the Indo-Germanic languages would not gain by such an examination of the most perfect member of the family.

The advantages which classical scholarship would derive from a more intimate union with comparative philology may easily be enumerated; and though some eminent verbal critics were disposed at first to reject the proffered assistance of their new ally, the more genial and enlightened students of Greek and Latin literature were prompt in their recognition of the coming reform of grammar. In the year 1836 — only three years after the first instalments of Bopp's *Vergleichende Grammatik* and Pott's *Etymologische Forschungen* were given to the world — C.O. Müller, who perhaps took a more completely literary view of classical scholarship than any German of our days, said distinctly, with reference to the narrower views entertained by G. Hermann: "it has now indeed come to this, that philology must either renounce altogether any historical knowledge about the growth of language, and all etymological researches into the form of roots and the organism of grammatical structures, or trust herself in these matters entirely to the guidance and counsels of the comparative study of language*." The true scholar is of course not merely a student of the Greek and Latin languages and an inter-

* *Götting. Gel. Anz.* 1836, pp. 169 sqq.; *Kleine Schriften*, I. p. 12. The following are the words in which Hermann expressed his prejudices against comparative philology: "alii non magis multa justaque ratione exculi, lucem sibi inde ubi sol oritur, percussam aurora boreali, affulsuram sperantes, ad Brachmanas et Ulphilam confugiunt, atque ex paucis non satis cognatarum linguarum vestigiis quæ Græcorum et Latinorum verborum vis sit explanare conantur. Qui ut hic illic alicujus vocabuli formæve originem invenient, tamen ad Græcæ Latinæque linguæ rationem explicandam vereor ne non plus lucentur, quam si Germanus aliquis gentis suæ linguam plurima vocabula communia cum Græcis sciat: quo ille sua lingua nihilo rectius utetur, quam si id nesciat."

preter of the authors who have written in them. It is his business to lift the curtain which has fallen on the glories of the past: to bring Athens and Rome again upon the stage: to enable the modern reader to regard the old authors and the events of which they write with the eyes of a contemporary. With regard to this latter function the study of comparative philology is of little avail. The Greek and Latin authors must be read together and in connexion, and we must endeavour to peruse them with as little interruption as possible from modern and extrinsic associations. But for the study of the Greek language alone and for the critical interpretation of Greek authors, comparative grammar is indispensable. And first, with regard to the explanation of particular passages, in which daily experience teaches us that much remains to be done even after all the labours of preceding scholars. The method of most extensive application is indeed purely a literary one: it is to deduce the meaning of the words in question from a general survey of the connexion of thought in the whole work, and, for the language, from a comparison of the passage with other similar ones in the same or contemporary writers. Cases, however, frequently occur in which the difficulty or misapprehension results entirely from an ignorance of the meaning of some particular word; and though, as even Thomas Aquinas has told us*, the signification of a word is not identical with its etymology, yet the latter is sometimes essential, on the principle of suggestion, in order that we may arrive at the former, which in most instances will also be determined, *prima facie*, by the context. Now in such cases we must have recourse to comparative philology combined with, and regulated by, the old method of scholarship, and we hope to show, in the course of the following pages, that something may be effected by such an

* *Aliud est etymologia nominis et aliud significatio nominis. Etymologia attenditur secundum id a quo imponitur nomen ad significandum: nominis vero significatio secundum id ad quod significandum imponitur, quæ quandoque diversa sunt; nomen enim lapidis imponitur a læsione pedis (!), non tamen hoc significat. Alioquin ferrum, cum pedem lædat, lapis esset. Similiter etiam nomen superstitionis non oportet quod significet illud a quo nomen est impositum.*—THOMAS AQUINAS, *Summa Theolog.* II. 2, quæst. 92. *Articulus primus: conclusio ad 2, p. 201. Edit. Paris. 1631.*

union. But secondly, it is also the object of the Greek scholar to anatomize the forms of the words, to classify them according to their etymological coherency, and so to simplify the practical grammar of the language. For this purpose again comparative philology is indispensable. If we were confined to the Greek language we should know absolutely nothing of the principles of its verb-conjugation, of the declension of its nouns, of the value of its particles, and of the real causes of its peculiar conformation. A sufficient proof of this is furnished by the old grammars and lexicons. But after we have once taken up the higher ground of comparative philology our difficulties on these points, be they ever so great, immediately vanish, and our perplexities, however intricate, are at once unravelled. In consequence of the facility with which all this is effected by the true scholar, many, who knew little either of the language which they wished to illustrate or of the aids which they sought to employ, have been led to attempt a solution of all the difficulties of Greek Grammar by a comparison with Latin, German, or Sanscrit. It is not to be wondered at that such persons should fall into great errors and incur the just reprobation of mere Greek scholars. At the same time, however, it is not to be supposed, as some of these last have inferred from the failure of the would-be philologers, that he who would increase our knowledge of the Greek language must confine himself to it, and that the study of comparative grammar is rather injurious than beneficial*. It is true that an accurate study of the Greek language alone is more profitable to the educated man and to the scholar than a smattering in twenty others: for knowledge, which may be made the subject of thought, is always better than general information, which can only be ren-

* These remarks are pointed at Lobeck (*Aglaophamus*, p. 478, note i; *Paralip.* p. 127, note; *Pathol.* præf. p. vii) and his pupil Ellendt (*Lex. Sophocl.* præf. p. iii). See *Varronianus*, p. 144. They also refer to the Programme of the Imperial Academy of Sciences at St. Petersburg (29 Dec. 1836), proposing a reward for a treatise on the Greek dialects from which all consideration of Sanscrit affinities was to be excluded. This Programme is printed in Seebode's *Neue Jahrbücher*, vii. Jahrg. xx. Band. 3. Heft, p. 341. As usual Mr. G. Curtius follows in our steps in his review of Lobeck's *Rhematicon* (*Zeitschr. f. d. Alterthumsw.* 1848, pp. 151 sqq.).

dered available for conversation in society. It is also true that our means of elucidating the difficulties of the Greek language, from itself alone and independently of comparative grammar, are greater at the present than at any former time. The inscriptions which have been lately collected and explained, the remains of Greek grammarians and lexicographers which have been published from manuscripts in the various public libraries of Europe, and the labours of Lobeck and others in examining the forms of the Greek language as they appear in the whole range of authors, would have enabled us to arrive at more accurate conclusions, than was before possible, with regard to the earliest state of the Greek dialects, even though the other languages of the Indo-Germanic family had been unknown or neglected. But, though the comparative philologist would be much to blame if he failed, as some have done, to avail himself of these and similar resources, those are not to be listened to who would tell us, on the other hand, that the mere Greek scholar is more to be trusted than one whose studies, while equally accurate, have taken a wider range. It is as if a man, who might illuminate a room with a number of lamps, should find out that some one of them gave more light than any one of the others, and should therefore content himself with this one alone. The industrious observer of phenomena in the Greek, or any other language of the family to which we refer, is but a hewer of wood and a drawer of water for the architectonic philologist: he brings some of the materials necessary for the work, but cannot lay claim to any share in building up the mighty fabric of general scholarship; for, dig as he may in his own narrow quarry, he will never catch a glimpse of the ground-plan and elevation so long as he remains there. One-sided views are of little use to the philologist of our day; and if he who forsakes the specialties of Greek for the generalities of comparative grammar has made a false step, neither is he to be commended, who, from prejudice or want of resolution, obstinately refuses to read more than one page of the great book of language which lies open before him.

39 With regard to the other question, namely, as to the benefits which would result to the general study of comparative grammar from a combination of it with accurate Greek

scholarship, very little need be said. The majority of those who have hitherto written on comparative philology have regarded the subject from the side of the oriental languages or of the German dialects, and occupied by the extent and novelty of their subject, have not paid sufficient attention to the old classical languages of Europe. In fact, no one of the great comparative philologists who have done so much for the science is a professed classical scholar, and, as might have been expected, they occasionally fall into errors with regard to the structure of the Greek and Latin languages, which are sufficiently obvious to the scholar who has been able to study those languages with the advantages which may be derived from an acquaintance with the results of their laborious researches*. For

* It would be easy to give examples of the mistakes into which comparative philologists have been led by the habit of starting invariably from Sanscrit. Perhaps the best instance of the advantage, which they might occasionally derive from the converse process, is furnished by the word *vidua* compared with the Sanskrit *vidhavâ*. Bopp (*Gloss.* p. 321) and Benfey (*Wurzellex.* II. p. 272), adopt the opinion of the Sanscrit grammarians, that this word is compounded of the prefix *vi*, "without," and *dhava*, "a husband," and Max Müller, who accepts this interpretation (*Oxford Essays*, 1856, pp. 21, 22),—with the important deduction, that "if the custom of widow-burning had existed at that early period, there would have been no *vidhavâs*, no 'husbandless women,' because they would all have followed their husband unto death,"—says afterwards (p. 33), "it must be confessed that the old Latin *viduus*, a name of Orcus, who had a temple outside Rome, makes it doubtful whether the Latin *vidua* is really the Sanscrit *vidhavâ*, however great their similarity; unless we admit that a verb *viduare* was derived from *vidua*, and that afterwards a new adjective was formed with a more general sense, so that *viduus* to a Roman ear meant nothing more than *privatus*." No comparative grammarian, starting from the safe basis of classical philology, could have fallen into these difficulties and contradictions. There is not the slightest doubt that *vid-* or *id-* is a genuine Latin root, signifying to "divide" or "separate;" we have it in *di-vido* and *idus* (διχόμενις ἡμέρα); perhaps also in *video* (cf. *dis-cerno* with *di-vido*); and if so in οἶδα, εἶδον, &c.; and even in the Semitic בָּדַל (see *Maskil le Sopher*, p. 38). This root, in the same sense as in *viduus*, appears in Indo-European languages in which it is admitted that there is no trace of the Sanscrit *dhava*, e. g. the O. H. G. *witawa*, Goth. *viduvo*, Old Sax. *widowa*, Anglo-Sax. *vidwa*, Old Pr. *widewû*, Slav. *vdova*, Irish *feadh*. From this we should infer that the Sanscrit is the corrupted form, and that the root of *vidhavâ* is really that which

example, Bopp's *Comparative Grammar* is conspicuously deficient in that critical tact which is rarely found in any one who has not passed through the regular training of the older classical scholarship; nor indeed does this excellent etymologist give any evidence of an extensive familiarity with the Greek or Latin authors. Intimately acquainted with the old languages of India and Persia, and well disciplined in Grimm's Teutonic philology, Bopp has not been able to acquire either the knowledge or the habits of mind which characterize the ripe and elegant scholar. His own field is wide, and he has well surveyed it. But he has not crossed its boundaries. It must not be forgotten, however, that, although the science of comparative philology advances so rapidly that every succeeding writer, if competent to add any thing to the stock of knowledge, is also able to correct many mistakes and supply many deficiencies of his predecessors, no one ought to make this the ground of any assumption of superiority; for it would well become every one who follows in the steps of Grimm and Bopp to recollect that he must himself have fallen into much graver errors had not these men gone before him: the *κελευθο-
ποιοὶ παῖδες* 'Ηφαίστου, *χθόνα ἀνήμερον τιθέντες ἡμερωμένην*, should be held in honour even by the constructors of rail roads.

40 To pass from these general considerations to the subject at present before us, it may, we think, be concluded, that the time is at length come when the Greek language at all events must be subjected to the same scrutiny, absolute and comparative, to which the great body of German dialects has been submitted by Grimm, and the Sanscrit, Zend, and Slavonic, in addition to these, by Bopp. This examination, however, should be lexicographical as well as grammatical. Buttmann was well aware of this, when he added his *LEXILOGUS* to his admirable Grammar. And here let us express our regret that a man so wonderfully gifted, combining as he did all the learning of the old school with sound views and unexampled ingenuity, was placed in an age preceding though by a few years only the full establishment

also appears as *bhid*, Lat. *fid-* (in *findo*), the termination bearing the same relation to the Latin *-uus* that *tava* does to *tuus*.

of comparative philology*. It must be obvious to any reader of Buttmann's works, that, had he possessed a sufficient knowledge of the other languages of the Indo-Germanic family, especially had he been acquainted with the Asiatic branch, the work which we consider as incumbent upon the scholars of our age would not be still unperformed. As it is, he was in spirit a comparative philologist, and succeeding scholars must make his works, the Grammar and the Lexilogus, at once the model and the groundwork of their labours.

The object of this work, so far as it is confined to the advancement of our knowledge of Greek, is to give to the Grammar and Lexicography of that language all the aid that may be derived from the present state as well of Greek scholarship as of comparative philology; and for this purpose to combine in one body a series of contributions to the better classification of the facts of Greek grammar, and also to the explanation of those words which appear most frequently and prominently in the best writers, and the meaning of which is still doubtful or but half understood.

We proceed to set forth its object so far as it has reference to the general philosophy of language.

* Much the same remarks had been made by H. A. Hamaker, in a valuable work with which the Author did not become acquainted until some years after the publication of his first edition (*Akademische Voorlezingen*, Leyden, 1835, p. 3): "hoe dikwerf heeft niet Buttmann in dienzelfden *Lexilogus* zijne toevlugt moeten nemen tot gissingen en onwaarschijnlijkheden, waar het volle licht der waarheid hem zou hebben bestraald, zoo hij met de vergelijkende studie der Germaansche dialekten en haar vasten grondslag, de aloude taal der Brahmanen, ware bekend geweest?" Mr. G. Curtius, whose diligently concealed obligations to the present writer have been noticed in another place, nearly copies the words in the text in his recent work (*Grundzüge der Griechischen Etymologie*, Leipzig, 1858). He says (p. 17): "P. Buttmann possessed the genuine spirit of a discreet and keen-sighted philologist in such a degree that we must deeply regret that he made no use of the rich treasures discovered by Grimm and Bopp even in his life-time. He was just the man to have diffused new light by this means." Again in p. 19: "We may still always take him as our model in his mode of treating Greek words, especially in what concerns the distinctions of signification."

CHAPTER III.

THE PHILOSOPHY OF LANGUAGE.

41 Etymology and Syntax—how they ought to be discriminated. 42 Original unity of language, which is necessarily co-ordinate with human reason. 43 The Book of Genesis is in accordance with the results of philosophy in this respect; for it teaches: 44 (1) that language is an endowment, and not an invention; 45 (2) that differences of language are the effect and not the cause of dispersion. 46 Monumental writing connected with idolatry. 47 Spiritual abstraction favoured by alphabetic writing; this was manifested in the highest degree by the invention of printing. 48 Effects of literature on the structure of language; syntax and prose. 49 Passage of language from a primary to a secondary, and from this to a tertiary state. The latter presumes ethnical admixture as well as literary cultivation. 50 Degraded languages; these also capable of literary cultivation. The Chinese an example. 51 Outline of linguistic psychology. 52 Two elements of speech, (*a*) the organizing, (*b*) the material. 53 Abstraction and association. 54 Space and time. 55 Algebra. 56 Realism and nominalism. 57 Plato a nominalist. 58 Outlines of Plato's dialectics. 59 He was opposed to ultra-nominalism. 60 Design of his Cratylus. 61 Horne Tooke the modern representative of the school controverted in Plato's Cratylus. 62 Philosophical design of the present work.

41 **T**HOSE who have hitherto written on the philosophy of language have generally fallen into one of two errors; — they have either omitted altogether the consideration of that department which relates to the formation of sentences, or, what is worse, they have failed to discriminate the two divisions of the subject, and, conducting their etymological analysis on strictly logical principles, have necessarily taken a perverted view of the nature and object of their inquiries. In the present work we have endeavoured to remedy this defect, by showing that the resolution of a sentence into its elements is a totally different process from the analysis of those elements themselves — that in a scientific investigation of the general speech of man our principal concern is with the word, its structure and development; that the same causes which create syntax, or logical sentences, tend to corrupt and destroy the original forms of speech, so that the attempt to derive the elements of the word from the elements of the sentence is absurd, as seeking the whole in its part, and must lead to conclusions utterly false and contradictory.

A formal discussion of the philosophy of language attempts the solution of two problems; — it purposes to ascertain, first, the

origin of language; and secondly, the connexion of our words with our thoughts. But, although this may be adopted as a methodical division and for form's sake, the two questions, according to our view of the former of them, are in fact one and the same; for, if language is, as we have no doubt it is, a necessary result of the constitution of man as a rational being, if the gifts of reason and speech are necessarily co-ordinate, then there must be no discussion, but simply an explanatory statement, with regard to the connexion between language and mind.

42 The primitive state of mankind has been a favourite subject of inquiry both in this country and on the continent, and some theory of the origin of human speech has generally formed a part of such disquisitions. Till the introduction of the comparative study of languages the theorists wanted their facts, and therefore met with the fate of those who advance unsupported hypotheses—they did not arrive at any convincing results. The researches of the present century, however, have given an entirely new turn to this subject; the right method has been adopted, and it is this, — that the only safe conclusions, with regard to the primitive condition of language, are to be derived from a rigorous scrutiny of all the various forms which it exhibits in its existing state; and though philologers have not yet examined all the dialects of the world in a complete and scientific manner, they have advanced so far as to be able to divide them all into a few great families, and have moreover examined the different members of the class, to which our own language belongs, with a minute accuracy which leaves little to be desired: the facts with regard to this class have not only been carefully collected, but also scientifically arranged, so that the utmost reliance may be placed upon any conclusions logically deduced from them: and from a comparison of this family (considered in its unity, which is thus established), with the other great classes of the general language of mankind, a comparison guided and illustrated by sound psychological views, the most profound and highly-gifted of those philosophers who have devoted themselves to this study have inferred, that language is the necessary and spontaneous result of man's constitution, that human speech and human nature are inseparable, and consequently that language was origi-

nally one*: physiology has made some important approximations to a similar result with respect to the bodily structure of mankind†; and thus external probability leads us to the conclusion, that the varieties which we distinguish as well in the form as in the language of man must have been produced by the dispersion of the human race from some one home over the whole surface of the earth, and by the subsequent operation of the multifarious causes to which the different parts of the separated family would be exposed.

The result of investigations of this nature is generally more satisfactory to our inquisitive spirit than any written testimony, however authenticated, with regard to the creation and early state of man: for the facts, to which such a testimony relates, occurred long before the invention of writing; they are traditions which appear either as scattered fragments floating on the stream of time, or as remnants of the abandoned ark incorporated by more recent speculation in some pretended semblance of the original structure. When, however, we find that the most distinct, and perhaps, in its original form, the oldest of these traditions agrees exactly and entirely with the result of our anthropological studies so far as we have been able to prosecute them with

* William von Humboldt, the most eminent of those who have made the philosophy of the word their study, has stated his opinion to this effect in the most explicit terms. In a paper in the Berlin Transactions for 1820-1 (*Werke*, vol. III. p. 252), he expresses himself as follows: "According to my fullest conviction speech must be regarded as immediately inherent in man; for it is altogether inexplicable as the work of his understanding in its simple consciousness. We are none the better for allowing thousands and thousands of years for its invention. There could be no invention of language unless its type already existed in the human understanding. In order that man should understand a single word truly, not as a mere perceivable utterance, but as articulate sound denoting a conception, he must have already in his head the whole connexion of speech. There is nothing individual in speech; every one of its elements announces itself as part of a whole. Natural as the belief in a gradual formation of speech may appear, the invention of it could only happen at once. Man is man only by means of speech; but in order to invent speech he must be already man."

† See Dr. Prichard's *Researches into the Physical History of Mankind*, and Dr. Wiseman's Third and Fourth Lectures.

safety, the most exclusive votary of inductive science will hardly refuse to welcome such a confirmation of his independent researches. Every genuine philologist, who has adequately studied the subject, must of course reject as untenable the claim of infallibility, which has been made on behalf of a certain branch of Semitic literature; every honest man must indignantly protest against the mendacious sophistry with which those pretensions have been supported; and every sincere follower of Him, who both taught and lived a religion of loving-kindness, must shrink with loathing from the narrow and malignant passions inevitably fostered by bibliolatry. But though the philosophical scholar knows that the noblest records of ancient learning are but the products of that divine genius which God has given to man; though he cannot think that any old book is a *Διοπετὲς Ἀγαλμα*, which fell in perfect form from heaven, and should therefore be regarded with the homage of unquestioning and slavish idolatry*; though he can see that even the most venerable relics of the past are completed by additions of later growth, which have given an external finish to what was but a fragmentary torso; still he can look upon these time-honoured remains with a chastened respect, which is as far removed from irreverent depreciation as it is from irrational enthusiasm, and he can listen, like a disciple, to the words of ancient sages, without imagining that he hears the unearthly utterances of an oracle. To him, who cultivates classical and sacred learning with the one object of discovering the truth, it matters little that the Hebrew Pentateuch is really a compilation from a greater or less number of older books, and received its present form from an editor who was well acquainted with the traditions of the Babylonians and Assyrians among whom he lived in exile; he is not disturbed by the reflexion that in all probability the chronicles of Berosus and Sanchoniathon, if they had come down to us complete, would have rendered articulate and perspicuous much that is now obscure and enigmatical. He thankfully accepts what has been saved from the wreck of time, and while he applies the resources

* The cry *μεγάλη ἡ Ἀρτεμὶς Ἐφεσίων* (*Acts* xix. 28, 34), is really a representative of the only argument by which the corresponding hypothesis is maintained in modern times.

of his criticism to discover and eliminate the authentic ingredients and to interpret the true meaning of the restored documents, he feels that he has enough of internal evidence and extrinsic confirmation to justify his belief, that the books which still bear the name of the lawgiver of Israel contain the residuary substratum of those ancient and venerable traditions of the Aramæan race, which descended by an unbroken chain from the primitive and highly-favoured men who still enjoyed the higher inspiration of an unsophisticated nature, or, as the Jewish allegorist expresses it, heard the voice of Jehovah Elohim, as it floated to and fro on the evening breeze*.

43 Now the results of our philosophy are as follows. We find in the internal mechanism of language the exact counterpart of the mental phenomena which writers on psychology have so carefully collected and classified. We find that the structure of human speech is the perfect reflex or image of what we know of the organization of the mind: the same description, the same arrangement of particulars, the same nomenclature would apply to both, and we might turn a treatise on the philosophy of mind into one on the philosophy of language, by merely supposing that every thing said in the former of the thoughts as subjective is said again in the latter of the words as objective.

From this we should infer, that if the mind of man is essentially and ultimately the same, — in other words, if man, wherever he lives, under whatever climate and with whatever degree of civilization, is still the same animal, — the only reasoning and discoursing animal, — then language is essentially the same, and only accidentally different, and there must have been some common point from which all the different languages diverged, some handle to the fan which is spread out over all the world, some first and primeval speech; and that this speech was not gradually invented, but necessarily sprung, all armed like Minerva, from the head of the first thinking man, as a necessary result and product of his intellectual conformation.

But it is clear that the mind of man is essentially and ulti-

* *Genesis* iii. 8. See Kennicott, *Two Dissertations*, Oxford, 1747, p. 47, note k.

mately the same in kind. Whatever may be the form of his features or the colour of his skin, man is everywhere distinguished from the rest of animated creation by the godlike faculty of reason; and the scarcely less godlike attribute of speech is enjoyed by all human beings, from the broad-browed European, who speculates upon the high things of heaven, to his woolly-haired brother, who leads an unreflecting life in the arid plains of Africa. But this is not all. As the only combination of the two lives,—the animal and the spiritual,—as the only veritable *amphibion* in the world*, as the only union of immortal mind with corruptible matter, as the only being gifted with the co-ordinate faculties of reason and speech, man is not merely *one*; he stands alone among living creatures. And jealous for the dignity of his species and proud in the consciousness of exclusive privileges, he is led by his philosophical instinct to reject with disdain any attempt to classify him with the animal tenants of this lower world; and, that he may make the line of distinction between himself and them more definite and palpable, he claims for himself an aboriginal unity, and traces back the pedigree of his scattered families to one common ancestor and to one common home. It is true that there are great outward bodily differences between the different races of men, and that there have been found some advocates for materialism, who ignore the spiritual indications of unity, and deny the claim of the inhabitants of Africa to rank with Europeans as the same animal. But a more enlightened research has triumphed over all these difficulties, and it is now seen that the physical differences of the races spread over the earth's surface are explicable from secondary causes, on the hypothesis of a primeval identity of origin, and a subsequent dispersion of emigrants from the home of their family; and that we may account in the same manner for those differences in intellectual development which correspond to the physical differences of nations.

These are the results of our philosophy. And for the sake of that union between ancient tradition and inductive reasoning, which the philologist is always anxious to maintain, but which the insane advocates of an infallible literature are perpetually

* Sir T. Brown, *Religio Medici*, xxxiv.

endeavouring to disturb*, we will step aside to show, that, in this case at least, there is no conflict of authorities; that here there is no occasion for mutual concessions, or a feigned reconciliation; but that the Book of Genesis itself describes the speech of man as an endowment, not as an invention, and attributes the differences of human language to a constrained emigration from the aboriginal settlement of our race.

44 "And out of the ground," says the ancient Jehovist, "the Lord God formed every beast of the field and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof. And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field; but for Adam there was not found an help meet for him" (*Genesis*, ch. ii. vv. 19, 20). These words imply that the power of speaking merely, and not language, was given to man, and therefore there are no grounds for the inference which a modern writer would draw from the passage, that the language of Adam was an immediate revelation from the Divinity†. According to the plain construction of the passage, aboriginal man was so constituted that he had the power of speech, and this power he exercised first of all in giving names to the different species

* Mirabeau has well remarked: "Voilà ce que nos théologiens ignorans et vains devoient nous apprendre. Le grand art est de lier toujours la science de la nature, avec celle de la théologie, et non de faire heurter sans cesse des choses saintes et la raison, les croyans fidèles et les philosophes."

† Quand on lit dans la Génèse, que toutes les créatures passèrent en face de Dieu devant Adam, qui leur imposa des noms, espèce de baptême de l'esprit, qu'il leur conféra on conçoit pourquoi, dans le système des philosophes de l'Orient, qui est aussi celui de Pythagore et de Platon, l'homme est envisagé dans son origine comme un second créateur, comme un verbe incarné évoquant au moyen du discours les mystères de la création; espèce de Mage en rapport avec le monde idéal et le monde terrestre, avec la nature et Dieu. C'est le langage primitif des hommes qui est l'arbre de la science; c'est là, comme le disent les livres Indiens, le Veda Céleste; et quelque corruption que les infirmités de notre nature y aient introduite par dans son essence, c'est une révélation de la Divinité même (*Le Catholique*, Tom. i. p. 418, quoted by C. J. Sachs, *de statu generis humani originali*, p. 19 sq. Berol. 1831).

of animals; but, says the historian, although he had this power of speech, he had no one to converse with, no one to share his sympathies, no one gifted like himself with the wonderful powers of reason and speech, no help meet for him, among all the numbers of animated creation which thus passed in review before him; and so God created him a wife* as the partner of his joys and sorrows, and the living echo of the thoughts to which he gave an utterance in spontaneous articulations.

This short passage actually contains the outline of all that philosophy and philology have taught us of the probable origin of language. The ultimate results of human consciousness are, that the thinking subject *is*, and that there *is* something without him; that there *is*, in the language of the German philosophers, a *me* and a *not-me*, or, if you will, he *knows* that he himself exists, and *believes* that there is something which is not himself. In those two results of all consciousness, in the consciousness of self and of not-self, is comprehended all the world as it exists for the individual. In the former are included all the thoughts, feelings, impressions and ideas which a contact with the outward world and the consequent sensations produce upon the thinking subject. But the human mind is naturally impatient of pure thought: it strives ever after objectivity, and endeavours to complete and fix its inward conceptions by some species or other of outward manifestation; the thought completes itself in the expression. Even if a man were placed alone in the world with all the faculties which he now enjoys, he would give names to the different objects of animal creation as they passed in review before him, he would seize upon some one prominent attribute

* The manner in which the woman is created from the man in the Jehovistic account — for the Elohist, or, as we think, subsequent editor, assumes that the human race was created in pairs like the other animals (*Gen.* i. 27) — belongs to a class of allegories, found in most nations, of which we have the Greek philosopheme in Plato's *Sympos.* p. 191, and a separate application in the myth that Minerva sprang from the head of Jupiter, as Eve here springs from the heart of Adam. Those, who adopt the literal interpretation of the passage, may read, if they please, how two of their own prophets have explained the flesh which was substituted for the flesh and bone taken from the side of the Autochthon (see Hofmann, *Weissagung und Erfüllung*, i. pp. 65 sqq., and Delitzsch, *Genesis*, p. 113, who takes a somewhat different view).

in each class and mark it by a name of distinction*. This name he would no doubt express by that which is the only natural and obvious method, namely, by articulate sound. But if such an effort of language might be expected from a solitary man, it would be the inevitable consequence of his meeting with some other thinking and speaking being; he would then necessarily seek to transfer his thoughts to that outward objective world which was cognizable to his fellow as well as to himself, by the most natural and obvious method, which is, as we have said, by articulate sound; and if there were at first but two such persons in the world, their communications, regulated by a convention based upon a community of reason and necessitated by a community of wants, would constitute the first language, and, by transmission, the language of all mankind.

45 The same striving after outward expression, which necessarily produced spoken language, as its primary effect, led in the course of time to the invention of letters or writing as a more durable manifestation of the thoughts, which was, however, strictly artificial, and must therefore be carefully distinguished from the natural language which necessarily preceded it. The first writing was not alphabetical; each symbol was an independent and significant term, and the huge masses of stone which they set up for monuments, the walls and temples which they built, and the rude figures which they carved and painted upon them, were each and all of them distinct words. The pyramids, arches, and obelisks on which the traveller still gazes with wonder, the ruins of Egypt, Babylon, and India, are not merely, as a quaint writer † has called them, the irregularities of vainglory, the wild enormities of ancient magnanimity; — they are the huge chronicles by which the men who built them tell to posterity the wonderful history of their industry and of their art, — the writing of a race of giants, traced with enduring characters on the great page of nature, which neither the rage

* "Without looking to the communication between man and man, speech is the necessary condition of the thought of the individual in secluded loneliness." Humboldt, *über die Verschied. des menschl. Sprb.* p. 53.

† Sir T. Brown, *Hydriotaphia*, ad fin.

of the elements, nor the passions of men, nor even the slow sure hands of time have been able as yet to convert into a palimpsest. The primary impulse to these rude writings was a hankering after durability, a desire to leave a lasting memorial of their history, which should at the same time serve as a rallying point to their descendants. According to the sacred writings, they wished to build themselves a city and a tower, and to make themselves a name, lest they should be scattered abroad upon the face of the whole earth: as a punishment of this attempt the dispersion and consequent varieties of human language took place (*Genesis*, xi. 4 foll.). It does not in any way appear from the words of the sacred narrative that the common language of man was violently and suddenly broken up into a number of different speeches or dialects. Indeed it has been more than doubted by some of the most learned commentators whether the confusion of tongues really means anything more than the sudden manifestation of a spirit of dissension among those who were previously united in a common design*. The words of Scripture

* This view of the passage was first proposed by Vitringa (*Observ. Sacr.* Tom. i. p. 106), who is followed by Robertson (*Clavis Pentateuchi*, pp. 93, 96) and opposed by Perizonius, *Orig. Babyl.* c. ix., whose views are adopted by Dathe and Rosenmüller. It is the obvious intention of the writer of *Genesis* to make Babylon the scene and the starting point of the dispersion of men. This is clear from the use of the particle שם v. 7, which is emphatically repeated in v. 9, and from the etymology proposed for the name בָּבֶל, *Bável*, which the writer connects with the root בָּלַל, "he poured forth," though the word would be more naturally explained as باب بل, *Bab Bel*, = בֵּלַב, *porta vel aula, civitas* (*Beli Winer s. v.*). As Robertson rightly observes, all depends on the meaning of the words שָׁנָה and דְּבָרִים in v. 1. He says: "etiāmsi שָׁנָה significat aliquando linguam, dialectum, ut in *Jes.* xix. 18; xxviii. 11; xxxiii. 19; *Ezech.* iii. 5, 9; *Ps.* lxxx. 6, *Scriptores fere sacri sermonis dialectum, et linguam per שָׁנָה exprimunt; iis in locis ubi omnibus constat de dialectis, non vero de sermonum sententiis, agi. Vide Gen.* x. 5, 20. Vox דְּבָרִים verti possit ratio æque ac sermo, uti λόγος apud Græcos; hic igitur reddi possit דְּבָרִים per ejusmodi sententias quibus inest consilium et deliberatio." But even if we take the words literally, and consider שָׁנָה, "lip," a synonym of לָשׁוֹן, "tongue," it is clear from *Ps.* lv. 10, which perhaps contains an allusion to this very passage, that according to the Hebrew idiom a distraction of counsels might be spoken of as a division and confusion of language: for David says with reference to Achitophel and his brother

are (vv. 7, 8): "Let us go down, and *there* confound their language, that they may not understand one another's speech. So the Lord scattered them abroad from thence upon the face of all the earth; and they left off to build the city." The plain construction is, that as the offence of the Noachidæ consisted in their reluctance to emigrate, their punishment was the dispersion which they sought to avoid; and this dispersion might be, and probably was, a cause of the difference of tongues, but could hardly have been an effect of it; for if any two sets of men had a common object in view, they would not be long in finding a medium of communication. The statement therefore in the Book of Genesis is simply this; that when the whole or a considerable portion of the early inhabitants of the world were settled in Mesopotamia, their attempt to contravene the decree of Providence, that man should multiply over the whole face of the earth, was punished with so complete a dispersion that large gaps were left between the settlements of the different races, and by the operation of secondary causes the languages of the earth became different. On the supposition that the language of man was originally one, it is hardly necessary, as Niebuhr suggests*, to suppose also a miraculous divulsion. If the dispersion took place at a time when man had not passed beyond the pastoral condition, and it is clear from philology, that even the Iranian branch was still in this condition at the time when its tribes ceased to live together on their central plateau, — it might have been occasioned by natural causes, such as the want of pasturage for their increasing flocks and herds, and would inevitably lead to a wide-spread and immediate separation of the different families, who would go

conspirators: בָּלַע אֶת-לִשְׁוֹנָם, "Swallow up, O Lord, divide their tongue," where the root בָּלַע clearly points to the name בָּלָא given to the Patriarch in whose time the dispersion is placed; *Gen.* x. 25. With regard to v. 4, the phrase בְּשָׁמַיִם יִשְׁמְעוּ is merely an exaggeration like the epithet *ὀὐρανομήκης*; and Le Clerc has shown that שֵׁם, "a name," means simply a monument or pictorial commemoration; cf. 2 *Sam.* viii. 13, and Ennius, *Annal.* xvi.:

Reges per regum statuasque sepulcraque quærunt,
Ædificant nomen, summa nituntur opum vi.

* *H. R.* i. p. 53, Tr.

farther and farther apart, under the influence of the exigencies which led to their primary disintegration. As far, however, as the statement in the Book of Genesis is concerned, the so-called confusion of tongues resolves itself into a case of disunion and dispersion; and science admits that this is the most probable cause of physical and linguistic differences.

46 One of the earliest and most important results of that hankering after outward manifestation, which produced the first rude monument and picture-writings, was the introduction every where of idolatrous forms of worship. The first great fact of consciousness is, as we have seen, the existence of an external world in contrast to the thinking subject. To this belief the mind attains on the evidence of the perceptions excited and called into being by contact with the world of sense. But there is another belief, to which the reason comes almost as soon on the evidence of its own reflexions, the belief in a superior being who created the subject as well as the object of consciousness, the great point of union to the two contrasted realities*. It is, however, much easier to contemplate the common objects

* In stating that the belief in a creator and governor of the world and of man is an instinctive and inevitable conviction, we do not mean to question the necessity for a revelation to teach us the personal existence of the Deity, and the nature of sin and its remedy. We have pursued this subject elsewhere (*Christian Orthodoxy*, pp. 100 sqq.). Still the revelation must be within the limits of our intellectual capacity, and must be capable of approving itself to our reason and conscience. Whatever is unintelligible is simply not revealed. Whatever runs counter to our moral instincts is *ipso facto* disallowed as not of divine origin. Mr. Mansel's examination of this question (*Limits of Religious Thought*, Oxford, 1858) is utterly inconclusive. He is a dexterous logician of the Hamiltonian school, and is well read in certain departments of metaphysical literature; but he has yet to learn the first elements of theology, and he seems to be quite unable to appreciate the results of biblical criticism, even if they are not unknown to him. He writes as if the adversaries of bibliolatry were not driving with loosened reins over the flimsy ruins of the structure which he regards as still intact. In referring to the present writer (note 13, p. 421), Mr. Mansel perverts and misrepresents an argument, which he would perceive to be the same as the only tenable portion of his own position, if he could only grasp the consequences to which his reasonings inevitably conduct the intelligent readers of his book.

of consciousness, than to think of and regard unceasingly this reality of the reason. And thus, impatient of abstraction, the reasoning being gives an outward manifestation to this as well as to his other thoughts; he writes God on the world as he wrote other things, with picture and statue imitations, and ere long worships the type instead of the reality; he falls down on his knees before a mere *memoria technica*, he pays homage to an object of sense, forgetful that the essence and definition of God, his own idea of a supreme being, is, that he is something without the subject, which is yet not a part of the external world. Picture-writing, and indeed all the arts, are but so many different indications of that feeling which gave rise to the worship of images; they are all different species of idolatry, different symptoms of man's aversion to abstract thought, of his love of dresses and disguises, of the unphilosophical tendencies of his lower nature. For what is philosophy but an undressing of the world*? It is to deprive our thoughts of all those outward veils and vestments in which they are generally too prone to wrap up the objects of their contemplations, it is to strip eternity of the robe of time, to divest existence of the accident of mortality, to let fall the many-coloured cloaks of individuality, in which the genus is enveloped, to see the soul unclothed and unencumbered with that garment of flesh which weighs it down to earth, and brings it to the near contact of death and decay. All this is difficult to the untutored intellect; as difficult as to gaze on the noon-day sun without a cloud, or a mist, or even so much as a bit of coloured glass, to break the intensity of his light†; and yet it is what we ought to do, what we must do if we would live as creatures that enjoy reason and hope for immortality.

47 The invention of alphabets, or of writing, in the modern

* "The beginning of all Wisdom is to look fixedly on Clothes, or even with armed eye-sight, till they become transparent" (*Sartor Resartus*, p. 66; see also pp. 74, 210).

† Plato, *Sophist*. p. 254 A: ὁ δέ γε φιλόσοφος, τῇ τοῦ ὄντος αἰὲ διὰ λογισμῶν προσκείμενος ἰδέα, διὰ τὸ λαμπρὸν αὐτῆς χάρας οὐδαμῶς εὐπειτῆς ὁφθῆναι· τὰ γὰρ τῆς τᾶν πολλῶν ψυχῆς ὅμματα κατερεῖν πρὸς τὸ θεῖον ἀφορῶντα ἀδύνατα.

sense of the word, was the first step towards the overthrow of idolatry; and it is a remarkable fact, that Europe owes her alphabet to the only nation, which, in the remote ages, preserved itself to any considerable extent from the worship of symbols: but still it was only a partial remedy; for books, those sworn foes of all idols, of all worship of the world of sense, were but few, and even "the old man eloquent" preached his mellifluous wisdom to a small audience. It is true that wherever they went they were fraught with a real vitality; they sped like the knights errant of old, releasing many an oppressed mind from captivity, and here and there lighting the lamp of truth in a land of darkness; yet their influence was very limited, and even after the Christian religion had appeared, causes, which are well known, operating with it, crumbled the old fabric of civilization into minute fragments, and the mind of man was again a worshipper of images and of art. At length came the invention of printing, the most important event, perhaps, in the history of the world. From this time forth, the book was not a solitary hero, a Hercules or a Theseus, striving for the liberation of men from the giants who tyrannized over them. Their name was legion; in infinite hosts they spread themselves over the world, conquering and to conquer. First of all, the idolatry of popery fell before them; then art as the instrument of idolatry was overthrown; philosophy was by them reinstated in her rightful dominion; philology came forth as her hand-maid; feudality and tyranny gave way to their victorious march, and to this day the despots of the world tremble before them. Let us not be deceived: Luther was great, but Guttenberg was still greater*. The letter

* Luther himself called the invention of printing "das letzte Aufloern vor dem Erlöschen der Welt" (Falkenstein, *Gesch. der Buchdruckerkunst*, Vorrede, p. 1). The reader will find in Victor Hugo's *Notre-Dame de Paris* (Lib. v. ch. 2, in the chapter headed, *ceci tuera cela — le livre tuera l'édifice*), some remarks on this subject, written in a wild and extravagant tone, as is the wont with modern French authors of that school, but yet very striking and true. A more recent French writer has taken up the same theme quite in the spirit of the text above, which was written 20 years since. "Roger Bacon," says Arsène Houssaye (*le Roi Voltaire*, 1858, p. 13), "qui pile dans sa cellule le soufre et le salpêtre, servira les haines religieuses qui donnent la fièvre à Voltaire; mais

did not kill but gave life, for it was by the letter that the spirit lived again, and it is the aid of the letter, it is philology, in one of its forms, which we must have recourse to whenever we would struggle with those idols of the forum*, the realized ideals that ever and anon usurp the throne of reason, and tyrannize over the misnamed free-will of man†.

48 From these reflexions on the influence produced upon literature, and, through it, upon the opinions of the world, by a greater facility of writing, and an unbounded circulation of written documents, we come naturally to consider the effects of the invention of writing on the spoken language of which it is the secondary expression. The art of writing was a mere invention; it stands on precisely the same footing with the other useful arts: hence it was at first rude and uncouth; and as it did not for a long time arrive at perfection, or become so easy as to fall into general use, it has produced, by its want of completeness, great and lasting evils on the mind of uneducated man. But language was a spontaneous result of our organization, and thus, like every production of nature, was as perfect at the beginning, indeed much more so, than it is now, when literature or the written word has developed itself in a thousand different ways. If any one thing more than another can show the absurdity of those who speak of an invented language, it is simply this fact, that the oldest languages are always the richest in materials, the most perfect in analogy, the most uniform in etymological organization. Philology too instructs us that those very words, which the believers in an invented language regard as the most difficult to invent, and therefore as the last introduced, are, in fact, the basis of all language; for instance, the pronouns and numerals, which Adam Smith‡ considers of recent introduction, are known to have been the very oldest part of every tongue; for it is just

Gutenberg va donner les armes à la raison. L'Évangile de Voltaire va courir sur le monde comme si les millions d'oiseaux l'emportaient sur leurs ailes: l'imprimerie tuera la poudre. Ceci tuera cela."

* Bacon's *Novum Organon*, Lib. 1. Aph. 59, 60.

† Carlyle's *Hist. of the French Revolution*, 1. p. 13.

‡ *Considerations concerning the Formation of Languages*, at the end of the *Theory of Moral Sentiments* (Vol. II. p. 431).

these words which retain their identity in languages which have been longest separate, and have therefore become most unlike in other particulars. The effect of increased use upon the structure of inflected language is rather to weaken and corrupt than to improve or amplify; and it may be laid down as a general rule, that, as such languages remove themselves from their origin, the love of what is called *euphony* gains ground more and more, the elements or roots are no longer clearly discriminated from the terminations, and the meaning of the separate parts of the word becomes less distinguishable, till at last all inflexion is superseded by a system of prefixes and auxiliaries. The monosyllabic languages, which are the most imperfect of all, appear to be degenerated forms of older and more complete idioms. It may seem strange, but it is nevertheless true, that this corruption of the forms of language has arisen not in spite of, but directly in consequence of literature; and the invention and diffusion of writing, which have produced such important results in literature and science, and, through them, on the general mind of man, have thus contributed to undermine the mighty and perfect structure of spoken language, the immediate production of that reason of which writing is so important an instrument. This has not been generally remarked*, and it will be worth our while to bestow a little consideration upon it.

The beginning of literature has been prior to the beginning of writing in all those countries in which literature has subsequently attained its greatest development. As the want of writing materials necessitates the adoption of metre, the first composition in every language is poetry. Had the invention of writing and printing been coeval with the first beginnings of language, we should certainly never have had an epic poem, perhaps never a line of poetry in the world. Besides, there appears to be something in the nature of early man, full as he is of sublime inquiry, and impressed with the wonders of the earth and the sky, which he gazes on with awe and veneration, that

* It has been noticed, however, that writing could never produce any change upon the spoken language otherwise than through the literature. (See A. A. E. Schleiermacher, *de l'Influence de l'Ecriture sur le Langage*. Darmstadt, 1835, p. 101).

leads him on to poetry. The language of the old world streamed freely from the breast, swelling with infinite redundancy of expression, replete with the richest and most significant compounds, and ever bursting forth into song. "We may suppose," says William von Humboldt*, "that there was hardly in any desert a wandering horde which had not its lays. Man, as a species, is a singing animal, connecting, however, thought with his melody." The sage, who discoursed to his disciples on the mysteries of man and the world, set before them "the sweet food of sweetly-uttered knowledge†," and the chronicler, who wished to perpetuate the past deeds of his warrior-race, sang to the harp the verses he had composed. Prose can only arise after a long period of civilization, when writing has become tolerably easy, and writing materials sufficiently abundant‡; it keeps pace with the logical or syntactical development of a language; so that writing, which can produce no effect in the way of improvement on the forms of a language, exercises a most important influence on the construction and connexion of its sentences, and therefore on the science of the people who use it. The method of language gains at the expense of its materials. It is observable that the first literary productions of a nation, their epic poems and lyrical hymns, are either entirely devoid of syntax or but inadequately provided with it. In the earliest poems of the Indians, for example, the Râmâyana and Mahâ-Bhârata, and still more in the hymns of the Rig-Vêda, there is no syntax or construction properly so called§; and as we do not know to what extent prose composition was cultivated by the Brahmins while the Sanscrit was still a living language, we cannot say how far they ever arrived at a logical syntax. And this of itself is some argument for the inference, which is strengthened by other considerations, that the Brahmins had no alphabet when they brought

* *Über die Verschiedenheit d. menschl. Sprb.* pp. 59, 60.

† Sir P. Sidney, *Defence of Poesy*, p. 495.

‡ *Scripturam tentare et communi usui aptare plane idem videtur fuisse, atque prosam tentare et in ea excolenda se ponere.* Wolf, *Prolegomena ad Homerum*, p. 72.

§ By syntax we mean the strictly logical conformation of sentences, including that accurate discrimination of subject and predicate, to which the article is more or less necessary.

their Vaidic hymns into Hindostan, but that they borrowed the Phœnician writing, which they found already in use among the earlier Arian inhabitants of northern India, and subsequently improved and extended it, until it assumed that most elaborate and ingenious form, which is known as *Dēva-nāgarī**. In the Greek literature, however, we possess an excellent specimen of a language developed through all the successive stages, from the rude luxuriance of the Epos to the careful but barren elegances of logical prose; for Hellenism, after it had secured its predominance over the Pelasgian or older element, was subjected to no external interference; its changes and progressions took place within itself; and it may therefore be cited as a good example of the influence of literature and civilization on the syntax of a pure and highly-cultivated idiom. In this language, before all others, we see the article, that great implement of logic as distinguishing the subject from the predicate, disunite itself from the pronoun or general designation of locality; in this language we see the differences of mood developing themselves from dif-

* On the relations between the Brahmins and other Arians of India, see below; § 84. And for the different opinions entertained respecting the Indian alphabets, see § 105. Strabo tells us, on the authority of Nearchus, a contemporary of Alexander (p. 716 D): τοὺς νόμους ἀγρόφους, εἶναι τοὺς μὲν κοινούς, τοὺς δὲ ἰδίους — and on the authority of Megasthenes, who was resident for Antiochus at the court of Chandragupta (Sandrocottus), he mentions (p. 707 B): οὐδὲ γὰρ γράμματα εἰδέναι αὐτοῦς, ἀλλ' ἀπὸ μνήμης ἕκαστα διοικεῖσθαι. Now as the name of Antiochus actually occurs in the inscriptions of Aśoka as *Antiayako Yona rāja*, "Antiochus, king of the Greeks" (Prinsep's *Essays*, II. p. 15, ed. Thomas), these statements must refer to the Brahminical as distinguished from the popular language; and there are other reasons for concluding that the Vēdas were taught orally, and retained in the memory without the aid of books. It is expressly stated that *krama-pātha* is *smṛitiprayojanaḥ*, i. e. "quod memoriam adjuvet in ediscendis ac tenendis hymnis Vedicis." See Weber, *Ind. Skizzen*, p. 133. Bunsen carries back the grammatical studies of the Indians and the formation of prose to the middle of the 7th century B. C. The following is his table of dates (*Ægypten*, V, a, pp. 204, 5):

	B. C.
Pāṇinī	350
Yaska's <i>Nirukta</i> , or interpretation of the Vēdas	450
The Pratisākyā	550
Older grammarians	650

This table rests upon conjecture rather than induction or evidence.

ferences of tense, and all the syntactical modification of the subordinate or accessory verb expressed by the participle, an etymological modification of the verb; in a word, the Greek language, like Mahomet's coffin, which hangs between earth and heaven, has taken the middle place, between the synthetic and analytical languages, combining the perfection of the word with the regularity of the sentence, to a degree which no other idiom can parallel. The language of Homer is totally different from that of the later poets, and although his lines are not so devoid of logical structure as the *ślōkas* of the Indian poems, (and this is perhaps explicable from the fact that our present text of the Iliad and Odyssee is little more than a *rifacimento* of the original works), it is still obvious on the most hasty perusal that the logical structure of sentences, for which prose Greek is so remarkable, had not yet established itself in the language. The same is also evident from the old Attic prose of Thucydides, which is full of what we should call bad grammar, arising of course from his inability to correct and polish his style by writing his sentences over and over again. Thus we often find that he has forgotten at the end of a sentence how he commenced it, or has purposely changed the construction, without being able, from want of facility in the mechanical part of writing, to retouch the beginning of the period. When Plato and Demosthenes flourished, the materials and habit of writing must have improved wonderfully, as we may infer from the correctness and polish of their style; it is stated, too, that the former used frequently to rewrite his works, and that a tablet was found after his death in which the words at the beginning of the *Republic* were transposed in a number of different ways*; and we are told that Demosthenes copied out the history of Thucydides eight times†. Even in the Attic dramatists there is a great difference between the construction of the choruses, written after an old model, and the more prosaic dialogue; and yet this last is by no means so conspicuous for that discrimination of the subject and predicate by which the prose works are distinguished.

* Quintilian, viii. 6, § 63; Dionys. Halic. *De Compositione Verborum*, p. 208, Reiske.

† Lucian, *adv. indoctum*, p. 102.

Whenever a language has once arrived at a full syntactical development, this distinction between prose and verse ceases to exist; the constructions in poetry then possess the same logical exactness as those in prose. But the Attic idiom, though progressively approximating to this state, did not attain to it till the time of Xenophon and Plato, the latter of whom gave the first hints of the proper analysis of the sentence*, which he could not have arrived at had not the Greek language been by that time capable of logical prose: for in order that the theory of syntax may be discovered, the language itself must have become syntactical. As Plato discovered this theory from the logical texture which his own language had assumed, conversely Aristotle, when he had formally and methodically set forth the principles of the Platonic analysis of the sentence, adopted his own style to this method; and thus he is not only the great expounder of the method of language, but also the most methodical of writers; a circumstance which has induced an eminent author† to compare his style to a table of contents. Thus we see that the history of Greek literature exhibits the development of a language originally the most copious into one confessedly the most syntactical, one in which the discovery of logic or of the principles of syntax was first made. And the wonderful fact about it is, as we have said, that it should have arrived at this ultimate state with a smaller sacrifice of its original form than any other language in the world. In general, however, it may be laid down that languages fall off in perfection of form as they gain in distinctness of literary composition, and that the same causes which destroy the symmetry and regularity of the structure of words, as a product and counterpart of the mind, promote the efficacy of language, as an instrument of science. Examine the analytical languages of modern Europe — our own for instance; you will find that in the arrangement of their words in sentences they are absolutely confined to the logical method. And what is the state of their etymological structure? In the English language we have no distinction of genders by means of inflexion, no declension, no facility of forming com-

* See below, chap. vi.

† The poet Gray (Letter to Dr. Wharton, Dec. 1746).

pound words, and but a few fragments of the Anglo-Saxon conjugation. In fact, the most perfect language for the purposes of deduction would be one, the words of which have no individual signification, but are merely general symbols; for the method of language, as we have before observed, is independent of any particular language; but as such a language can exist in writing only, it follows that writing must have an important influence on science. And this we know to be the case: for it is clear that the greatest advances in science have always been preceded by some great improvement in written language, whether it be the step from picture-writing to the alphabet, from the rude manuscript to the printed book, or from the abacus to Algebra.

49 These considerations lead us to expect in the languages of all nations in which we find an early use of writing and an early cultivation of pure literature, some indications of the triumph of syntax over etymology. To repeat here, what we have elsewhere stated*, this tendency is not so much a war of language with itself, as a contest between two modes of expression, one of which is best adapted to the memory unaided by written words, and the other best suited to the formal statement and registration of our connected thoughts. Accordingly, when we speak of languages as being in an old and new state or condition, we speak of them as more or less affected by the cultivation of prose literature and by the common use of writing. As we have not, by the nature of the case, any ancient language which is altogether unaffected by the written records which have transmitted it to us, we can only speak of these differences as differences of degree. But we may divide all languages known to us into three states or conditions, thus differing in the degree of detriment which their cultivation of syntax has caused to their etymological structure. We shall call these *primary*, *secondary*, and *tertiary* states.

(1) Languages in a primary, or highly etymological state, are those which have few or no syntactical contrivances; but complete and regular inflexions, and a living power of derivation and composition. In such languages, writing has been

* *Maskil le Sopher*, pp. 3, 4.

cultivated at a late period, and circumstances have not favoured the logical development of the language. The most remarkable specimens of languages in a primary state are, the Sanscrit, Selavonian, and old Latin.

(2) Languages in a secondary state are those, which, without sacrificing, to any very considerable extent, their inflexions and power of composition, have still attained to a clear and copious syntax. The most remarkable specimens of this class are, the ancient Greek, and the modern High German.

(3) Languages in a tertiary state are those, which have all but lost their inflexions and power of composition; which substitute syntactical contrivances for those variations of form, which, in the older languages, characterize differences of declension and conjugation; and which enjoy all the resources of logic in the construction of their propositions. To this class we must refer all the Semitic languages, the dead no less than the living, together with a considerable number of modern idioms, including the Romance languages*, and our own.

It is to be observed, however, that the passage of a language from a secondary to a tertiary state generally presupposes, in addition to the influences of writing and literature, some considerable infusion of heterogeneous ingredients produced either by conquest or emigration. Thus all the Semitic languages have lost their inflexions and their living etymology in consequence of a very early admixture of ethnical elements, to which the Book of Genesis bears satisfactory and circumstantial testimony. The Franks, when they conquered the Latinized inhabitants of Gaul, and the Normans, when they settled as a military aristocracy among the Anglo-Saxons, found, in the countries to which they migrated, languages capable of inflexion; and in each case the language which resulted from a compromise between the victors and the vanquished, sacrificed all the characteristics of etymological vitality. The same effects were produced in a minor degree by the Mohammedan conquest of Persia; and it appears that when the Etruscans subjugated the

* As we have already intimated (above, § 18) the original patois was utterly ungrammatical. The syntax was restored and extended by the literary efforts of the Troubadours.

Umbrians in Italy, the result was a mixed language, mainly that of the vanquished, in which the declensions and conjugations were nearly if not entirely annihilated.

50 It cannot be said that the passage of a language from one state to another, and the improvement of syntax at the expense of etymology, is in any case tantamount to a degeneracy of idiom. On the contrary, as we have already suggested, the tertiary state generally accompanies and promotes an advance in science and social culture. The degradation of a language is a different process, and it is attributable to a widely different cause. Speech is degraded when it loses its etymological structure without gaining the compensating advantage of a syntactical development; and this is occasioned by a retrogression in the social and intellectual position of the people, as when emigrants from a civilized community are widely dispersed, and reduced from an agricultural or political state to that of nomads, especially when this is accompanied by privations, and by the deteriorating influences of a worse soil or climate. All the sporadic or Turanian idioms of High Asia, of which we shall speak in the following chapter, are instances of a degradation of language: they are all probably depravations of the Iranian type. Similarly, the languages of Africa must be considered as successive products of Semitic disorganization: the Syro-Arabian tongue passes from the Abyssinian to the Galla and Berber, from this again to the Caffre, from the Caffre to the Hottentot, who is finally caricatured by the savage Bushman.

Any state of a language may become liable to this degradation. But, in by far the greater majority of cases, the idioms which have been subjected to this falling off were in their primitive state, or at least in a primary condition, when the causes which we have mentioned led to this depravation of their structure and capabilities. It is scarcely necessary to mention that a return to civilization is by no means denied to any degenerate or sporadic tribes, and that they may not only resume their social and political state, but may also be liable to the same influences of writing, and ethnical admixture, which produce the transition from the secondary to the tertiary state of a language. We have a conspicuous example of this in the

case of the Chinese. It cannot be doubted that the population of this immense empire is made up of successive stratifications of sporadic or Turanian immigrants, closely packed together, and reinitiated, at an early period, into the arts which their ancestors had cultivated in the original abode of the human race. The consequence of this revival has been to make the disintegrated remains of their degenerate idioms an artificial appendage to a system of written symbols. And to such an extent is this carried, that two entirely different spoken languages are represented by one single convention of arbitrary signs*.

* If there is any truth in the linguistic principles which are advocated in this work, it must be a philological paradox to maintain, as Bunsen does (*Brit. Assoc. Report*, 1847, p. 299), that we have a "monument of antediluvian speech" in the Chinese language, which, it is admitted (p. 284), has lost its etymology, and retains only a formal and meagre syntax. It seems also inconsistent with our psychological experience to hold that a root or crude-form, with a separable appendage, is more ancient or original than the complete etymological structure, which presents the object of conception in subordination to the thought-forms of space and time. Still more inadmissible, in our judgment, is the supposition that a language, which — like the *Ægyptian* — has a definite article, and other purely syntactical substitutes for an enfeebled etymology, is in a more primitive condition than those languages, which — like the oldest members of the Indo-Germanic family — still exhibit a perfect system of inflexions. We know by positive experience that terminations of all kinds may be worn out or become insignificant, and that, when this takes place, various syntactical contrivances are the inevitable results or concomitants of the change: and it is the tendency of our widest researches to convince us that this always occurs, when conquest or migration has introduced a fusion of foreign elements. But we have absolutely no single example of the converse state of things; there is no case, in which an etymological condition of language has sprung up from a crude series of monosyllabic juxtapositions: and it seems to us that we cannot make such an assumption without ignoring the obviously scientific procedure. Above all, we think that any success in an attempt to claim for the Turanian languages, and especially for the Chinese, a principal or even a representative position among the original developments of speech, must more or less weaken our belief in the spread of the human race from one common birth-place. The division of languages into two great groups — the Central and the Sporadic — and the recognition of the Chinese as a peculiarly affected member of the latter class, appear to us to indicate the only course, which can lead to a satisfactory solution of all the problems suggested by modern Ethnology.

These are the only changes to which language appears to be liable. It has a tendency to pass from an etymological to a syntactical state; and this process is facilitated by the cultivation of writing, and is carried to its fullest limits by the admixture of new ethnical elements. Language too may be degenerated or depraved, and in this condition it may, by the sacrifice of its few remains of vitality, become the instrument of literature and science, and minister to the intercommunion of civilized man. But if we believe that languages had a common origin, and that the aboriginal inhabitants of the world enjoyed a complete intellectual organization, we must conclude that the highly etymological condition of a language must have been its original type, and that all deviations from this type are of subsequent introduction, and should be explained by a reference to the operations of secondary and external causes.

51 We have now given a general sketch of the first part of the philosophy of language; we have sought to point out the original unity of speech, to show that spoken language is natural, but written language artificial, and to draw a bold and intelligible outline of the effects of the latter upon the literary development of a nation. It remains that we turn to the second part of the subject, and state, by way of explanation, the connexion between the results of psychology, or the science of mind, and of the philosophical analysis of inflected language. That such a connexion, or rather identity of results, should exist is necessary, if we are right in maintaining that language springs naturally and spontaneously from the mind of man.

The results of all that writers on the philosophy of mind have collected, with regard to our thoughts and the constitution of our intellectual powers, may easily be summed up, so far as they accord with our own convictions. Every man has one primary belief; that he exists, and that there is something without him, full of realities, animate and inanimate; he sees too an infinity of beings like himself, who live in the same belief. This something without him is known to him from his sensations, which, acting in the first instance on his bodily organs, produce an impression on his mind which we call a perception. These perceptions survive the presence and the influence of the

substance which caused them, they become a part of the mind, and are called conceptions. Now the mind of man is so constituted that, whenever a perception is recollected or a conception arises, it instantly awakes some other similar conception, or perhaps a whole train of them, connected by the relations of resemblance or contrast. This habit or tendency is called association or suggestion. We can also combine those conceptions at pleasure, so as to form new conceptions existing only in the mind, and this faculty is called imagination. Now all these powers, with the exception of the last, are confessedly enjoyed by the lower animals, and we class them all under the name Understanding, the faculty of rules, or the faculty of judging according to sense*. But there is also a higher faculty, which we alone possess, which presides over and regulates the understanding, and which we call Reason, or the faculty of principles. By this faculty we compare our conceptions with one another, we estimate their similarity or incongruity, we arrange the objects of our perception in classes, and these classes again under more general subdivisions; we compare these ultimate generalizations with one another, and so arrive analytically at absolute truth: or, in some cases, we seize upon the principles of science synthetically, *à priori*, and at once. It is this faculty which constitutes our humanity; it is to this that speech ministers as an indispensable, but subordinate, adjunct.

The knowledge of his own existence and the simultaneous belief in an external world, — this is the first act of man's consciousness. But this consciousness is itself subjected to two

* It will be observed that we use the term "understanding" in a more limited sense than others, Coleridge for instance, give to the "*human understanding*." Coleridge attributes to the understanding many operations which we consider as peculiar to the reason — discourse, abstraction, generalization, &c. (*Aids to Reflection*, p. 215.) We adopt the Kantian distinction, in general, but we are rather disposed to comprehend under the term reason every faculty which is peculiar to the mind of man, excepting the imagination, which, however, in its truest and highest form can exist only in a reasoning and speaking creature. For imagination, when it really deserves the name, is intimately connected and blended with the reason. It is in fact the poetical reason, or the realistic element in the reason. In its lower form it constitutes the fancy, which ministers to the hope and fear of infants and dumb animals.

other primary intuitions: it is subordinated to the intuition of space, for he is *here*, and everything else is *there*, and these are two positions; it is subordinated to the idea of time, for the very belief in his own existence presumes a continuance.

This then is the sum of psychology. Man is, and the world is, there is a *here* and a *there*, a *me* and a *not-me*, — the knowledge of this fact is consciousness. He has perception, conception, association, which constitute his Understanding. He compares, generalizes, knows, and discourses; these are the operations of his Reason. And all his thoughts are modified by and subordinated to his primary intuitions of space and time.

52 Now if language be, as we say it is, the genuine product of the reason, we should expect to find traces of all these conformations of the mind in the structure of our speech. And so it is.

Our analysis of the Greek and cognate languages has taught us that there are two primary elements of speech; the first, an organizing element which enters into all words, and which we call a pronoun; the second, a material element which constitutes the basis of all significant terms which are not pronouns. The pronoun expresses in the first instance the relation of the thinking being to the external world, of the subject to the object, of the *me* to the *not-me*; and this is formally put as an opposition of *here* to *there*. The first general and vague idea of *there* is soon split up into a number of modifications, of which the first is a distinction of objects in the *there* or outward world, according as they are nearer to or farther from the subject, and subsequently a designation of all the different directions in which they stand with regard to the subject. The pronoun therefore in its different forms is an expression of the first great fact of consciousness, — that we are and that there is something without us.

53 The material element of language includes the names of all the objects which present themselves to us in the outward world, and to our contact with which we owe the experiences that are the staple for our understanding. We find on examination that all names of things are generic terms, that they describe some particular quality or attribute of the object, which

strikes us as most remarkable in it, and by which we at once see its resemblance to the other objects of the same class. We observe, too, that even the words which we call proper names were originally generic terms, designating some qualities, and consecrated to certain particular objects possessing those qualities in a remarkable degree. It is, therefore, clear that the very act of naming implies classification and abstraction, or reasoning power; and when Adam is said to have named all the animals, this is only another way of expressing the fact, that by his reasoning power, which is identical with the power of speech, he divided them according to the *prima facie* classes of natural history. Of course, this use of general instead of special names has a great effect on the conciseness and perfection of language as an instrument of thought. But the process does not stop here; not only are individuals described by general names, but all the relations which bear any resemblance to the attribute from which the body of the name, or the root as it is called, is derived, are expressed by words into which that root enters; nay more, very many words expressing contrasted relations have the same root perhaps slightly modified. This is an exemplification in language of the principle of association or suggestion, which all psychologists recognise as one of the most important operations of the mind. All writers on suggestion or the association of ideas admit, either directly or by implication, that contrast or contrariety is a species of connexion among ideas; indeed, Brown makes it one of the *primary* laws of suggestion. Now, if we recollect that suggestion or association depends upon previous coexistence or previous proximate succession, we shall not wonder, that, in this natural and necessary process of expressing the greatest number of thoughts or modifications of thought with the fewest possible words or modifications of words, ideas of contrast, as well as ideas of resemblance, should be expressed by words, into which the same, or a slightly modified root enters; for all contrasts and resemblances are relations, and no idea of a relation could be formed unless we had seen the related objects together, or experienced the related feelings in close succession; but in this case, where the perceptions have taken place together, the recollection of one perception awakens a remembrance of the other; consequently, if we

have got a word to express one of these related ideas, that word suggests the other idea to our mind; therefore, the root of that word, or a slight modification of it, would naturally be adopted to express the other idea, whether it be an idea of contrast or an idea of resemblance. And thus we find that a word may bear two contrasted significations, or there may be two or more words, containing the same or slightly modified roots, which denote contrasted or contrary objects or feelings, when the objects or feelings have been seen, felt, or experienced, always or generally, in connexion or in immediate succession*.

54 Every word containing a root, or belonging to the material element of language, also contains by way of prefix, suffix, or both, a pronominal element. This is the counterpart in language of the psychological fact, that every act of consciousness is subordinated to the two conditions of thought, the intuitions of space and time. The old Epicureans maintained that the only real existences in the world were matter and space†, and that every thing else was either a property (*con-*

* The following are a few instances of the principle of association as it manifests itself in the same or a cognate language.

Contrast.	Cause and Effect.
<i>habere</i> , wish, <i>habere</i> , have.	<i>aio</i> , speak, <i>αἶω</i> , hear.
<i>cupio</i> , desire, <i>cupio</i> , take.	<i>αὐδάω</i> , speak, <i>audio</i> , hear.
<i>λάω</i> , wish, <i>λάω</i> , take.	<i>καλέω</i> , call, <i>κλύω</i> , hear.
<i>χορήσιμος</i> , <i>χοραιομεῖν</i> , assist, <i>χῆρος</i> , <i>χορῆ-</i>	<i>video</i> , see, <i>οἶδα</i> , know.
<i>ζειν</i> , want assistance.	"set" (place), "sit" (be placed).
<i>carus</i> , possessed and valued, <i>carere</i> , want.	<i>δέω</i> , bind, <i>δαίω</i> , burn.
"dear" (prized), because you have it, <i>δῆμος</i> , <i>δημός</i> , do. do.	
"dear" (expensive), because you want it. <i>ἄπτω</i> , fasten, <i>ἄπτω</i> , set on fire.	
<i>χρεία</i> , use, <i>χρεία</i> , need.	<i>δέκ-σιος</i> , <i>δέκ-ομαι</i> , the
<i>gestire</i> , wish, <i>gerere</i> , carry with one.	<i>χείρ</i> , { the in-
<i>trachten</i> , look at eagerly, <i>tragen</i> , to carry,	<i>hand</i> , { stru-
	<i>finger</i> , { ment,
<i>μένος</i> } a moving <i>μνήμη</i> } remain-	<i>αἰρ-έω</i> , { conse-
<i>μέμονα</i> } force, desire, <i>μένω</i> } ing.	<i>hin-than</i> , { quent
	<i>fangen</i> , { act.
<i>θείω</i> } quickness of <i>τίθημι</i> }	
<i>θοός</i> } motion, <i>θῆκος</i> } rest.	
"fast" (rapid), "fast" (fixed).	

† Lucretius, i. 446:

*præter inane et corpora, tertia per se
Nulla potest rerum in numero natura relinqui.*

unctum) or an accident (*eventum*) of these*. Time, for instance, was an accident of matter, not perceptible in itself, but to be inferred from the rest or motion of things†. With what connexion with this materialistic view we know not, but all people, whether philosophers or not, seemed to have made up their minds, till Kant appeared, that space at all events was something external, empirical, and real. Kant, however, deduces his critical philosophy from the position that space and time are *à priori* intuitions, because we cannot form a conception of outward objects without a presupposition of space and time; they necessarily form the basis of all outward phenomena; they are, both of them taken together, pure forms of all perception, and consequently make synthetical positions *à priori* possible‡. It is true that the intuitions of Space or Position, and of Time or Continuity, are equally original and equally necessary, but if we analyze them more rigorously, we shall find that the intuition of Time is only a refinement and modification of that of Space. These two primary notions may be otherwise stated as an intuition on the one hand of position or fixedness of objects with isolations or intervals, which is the intuition of Space; and an intuition on the other hand of continuousness or motion of objects, or of such a closeness and proximity in their positions, that the intervals are not perceived, or not taken into account, and this is the intuition of Time. Now it is clear even from common language, that this is the whole distinction between space and time; for the words which we use as indications of position, such as “before” and “after,” “backwards” and “forwards,” are also indicative of time. We shall, however, make our meaning clearer by an example.

55 That these primary forms of thought necessary to perception are the basis of pure mathematics, is distinctly stated by Kant§, and it is indeed obvious to every one who agrees with

* Lucretius, I. 450:

*Nam quæquomque cluent aut his conjuncta duabus
Rebus ea invenies aut horum eventa videbis.*

† v. 463: *Nec per se quemquam tempus sentire fatendum est
Semotum ab rerum motu placidaque quiete.*

‡ *Kritik der reinen Vernunft*, pp. 28—43.

§ *Ibid.* p. 41.

Plato in considering the exact sciences as derived from perception by the intellectual faculties. The two first invented of the exact sciences were Arithmetic and Geometry, which are both referable to the intuition of Space. The latter was always, in the hands of the old geometers, the science of position; in the former, all the principles are derived from the notion of intervals, and the primary names of the numbers are, as we shall hereafter see, pronominal words signifying position. For convenience in reckoning, it soon became customary to substitute for these arithmetical words a set of symbols, all of them single letters, and people were not long in inventing concise methods of combining these according to the principles of the science. But even these abbreviations were not enough, and a sort of shorthand was invented in different parts of the world, which Europeans have agreed to designate by the Arabic name *Algebra**. This written language, for it was only a set of symbols, and therefore could not be spoken, was, in process of time, extended to the expression of geometrical results: but only imperfectly; because the geometer sometimes encroached upon the domain of the other intuition; and a science of pure time had not been developed from the sciences of Space. In fact, the intuition of Time or continuity was much more difficult to deal with; like the old Heracleitean doctrines, it presupposed a continual flowing or change, and escaped from the grasp of expression. The great difficulty to be overcome was a philological one,—the construction of a language to express motion, time, or continuous change. This obstacle was surmounted at nearly the same period by both Leibnitz and Newton, and their discovery of the language of change was one of the greatest importance immediately for physical science, and ultimately, we doubt not, for philosophy in general. No one has been at the pains to point out the natural progress of this discovery: it will, we apprehend, be easy to do so. The most obvious example of continued change, or melting down of intervals, is that of physical continuous motion:

* This word is referred to ^{So}جبر, and signifies “reductio partium ad totum, seu fractionum ad integritatem” (Golius, c. 462; Freytag, i. p. 239 b).

so obvious, indeed, that the ancient philosophers included under the name *motion* (κίνησις) all that we include under the term *change*; thus Plato, *Theætet.* p. 181 D: δύο δὲ λέγω τούτω εἶδη κινήσεως, ἀλλοίωσιν, τὴν δὲ περιφοράν (read *φοράν*). *Parmen.* p. 138 C: κινούμενον ἢ φέροιτο ἢ ἀλλοιοῖτο ἄν. *Aristot. Nat. Ausc.* VII. 2, §. 1: ἐπεὶ δὲ τρεῖς εἰσι κινήσεις, ἥ τε κατὰ τόπον, καὶ κατὰ τὸ ποιόν, καὶ κατὰ τὸ ποσόν, ἀνάγκη καὶ τὰ κινούμενα τρεῖς. ἥ μὲν οὖν κατὰ τόπον φορά, ἥ δὲ κατὰ τὸ ποιόν ἀλλοίωσις, ἥ δὲ κατὰ τὸ ποσόν αὐξήσις καὶ φθίσις. In accordance with this, then, the earliest language or science of change borrowed all its terms and even its name from physical motion: though from the very first it was applied to the investigation of problems in change or continuity in general. The natural division, therefore, of the exact sciences is this. (1) The science of positions or intervals, which includes geometry and arithmetic. (2) The science of time or of continuous change, which comprehends mechanics, dynamics, and the great problem of physical astronomy. When Algebra, or the symbolical language in which the sciences of space were expressed, was applied to the science of time, it was called Fluxions or Differential Calculus; but it might in fact be called by the name of the older language, of which it is merely an extension. We are aware that an eminent mathematician, in the sister island, has asserted that Algebra, by which he means all that is included in the unphilosophical use of the word analysis, is the science of pure Time*, and he even goes so far

* Sir W. Rowan Hamilton, in the introductory remarks to an essay "On Conjugate Functions and on Algebra as the Science of Pure Time" (*Transactions of the Royal Irish Academy*, Vol. xvii. pp. 293 foll.), states "that his object is to enquire whether existing Algebra offers no rudiment which may encourage a hope of developing a science of Algebra, properly so called, strict, pure and independent, deduced by valid reasons from its own intuitive principles; and this not less an object of *à priori* contemplation than Geometry, not less distinct in its own essence from the rules which it may teach or use, and from the signs by which it may express its meaning; and that he has been led to the belief that the intuition of time is such an element." This is not the place to enter upon a formal examination of so profound a subject: but we are sure that any one who will look into Sir W. R. Hamilton's paper, and compare it with the explana-

as to say, that arithmetic is a part of the same science*: but with all deference to him and another distinguished analyst†, who defines Algebra as the science of general reasoning by symbolical language, we must insist that Algebra can never be called a science, when separated from its applications, which are all so many distinct sciences. If the science of pure time is coextensive and identical with Algebra, as the former scholar asserts, then must Geometry, which is the science of pure Space, become the science of pure Time whenever it is expressed in analysis. Algebra should be defined as the method or art of combining symbols, as a language in which we can carry on the most abstract and general reasonings about sensible objects, considered in their relation to one or other of our original intuitions.

It appears, then, from the progress and extension of Algebra, that the intuition of Time, though necessarily co-ordinate with that of Space, may be derived from it by adding the idea of motion or change, or by melting down the intervals which constitute position, and that in scientific language, at all events, the expression of Time is posterior to that of Space‡. In the common languages we find two classes of the material words, which

tion given in the text, must admit that he has confused the method of Algebra with one of its applications.

* *Ubi supra*, p. 308.

† Professor Peacock's *Algebra*, § 1.

‡ Mr. Mansel (*Limits of Religious Thought*, pp. 83, 204), says that all consciousness is subordinate to the general law of *time*, and that subordinate to this general law there are two inferior conditions, to which the two great divisions of consciousness are severally subject—our knowledge of body being governed by the condition of *space*, and our knowledge of mind by that of *personality*. "From these," he maintains, "are derived three corresponding systems of *necessary truths* in the highest sense of the term: the science of *Numbers* being connected with the condition of *Time*; that of *Magnitude* with *Space*; and that of *Morals* with *Personality*." We place this statement in juxtaposition with that in the text, which seems to us to expose before-hand Mr. Mansel's somewhat confused apprehension of the subject. The idea of *number* is an idea of fixity, for every number is a sum and a standing-point. The idea of *time* is that of continuous change, and we cannot express time in number without transferring it for the moment to the domain of space and magnitude. This is only one instance among many of the sham science which abounds in Mr. Mansel's book.

we call nouns and verbs. The former are capable of expressing relations of Space only: the latter denote actions or express relations of Time. Yet we find that both are made out of the same materials; the roots or stuff of language enter into each set, and they are each of them combined with pronominal elements, which denote the case-relations in the former, and the person-relations in the latter; the cases of the nouns expressing the position of some object with regard to other objects, the persons of the verb the point from which the action begins, or at which it ends. These, we shall see, stand upon exactly the same footing, and the expression of agency, whether effected by a case, a preposition, or a person-ending, is still strictly pronominal or derived from the intuition of space.

From this examination we see that the law according to which the words of a perfect, or, what is the same thing, an inflected language, are formed, that is to say, their anatomical structure, or internal mechanism, is the counterpart of what we know of the operations of the mind. Here, however, the parallel is at an end, and we must be careful to recollect that the words themselves, when once formed into a whole, are nowise representatives of any thing in the mind. They may go on through all possible shades of meaning, and even be used by abstraction without any regard either to their structure or primitive signification, and without in the least affecting the mind with a comprehension of their import: nay, it is, as we have shown, the natural process in language, as it develops itself syntactically, to destroy the fulness and significance of its individual words; and it is highly beneficial to science that such should be the case. A very pregnant example of this is furnished by those general abstract terms of which so much has been said by metaphysicians.

If we examine the abstract and general names in any language, we shall find that they are only tropical or figurative words properly referring to sensible objects; and the reason of this is obvious, for the whole end of language is to transfer our inward feelings to the outward world, so that they may become cognizable to others, and objective to ourselves; now in order to attach a name to a thing, it is necessary that the name and the thing should be presented to the observation a certain number of

times together: but it is easier to present a material object to the observation of another for the purpose of naming it, than to describe to him an impression or a thought; consequently, material objects are first named, and thoughts or ideas are described by a metaphorical reference to them. Of course, this method of forming our abstract terms, though necessary under the circumstances, is productive of serious inconveniences; by using metaphorical words, we are apt to reason vaguely in consequence of the different significations which the words bear in common language. Hence, for the purposes of science, it would doubtless be desirable to have a set of words which bear no specific meaning. But this is impossible in spoken language, except in the case of merely pronominal words, denoting not things but the positions of things: therefore it is only in Arithmetic, Geometry, and Music that we can have a spoken language perfectly general. In symbolical written language, however, it is possible to put down marks or signs, and invent laws for their combination without at all troubling ourselves about their interpretation; and it is to the invention of such a language, and its subsequent extension to subjects beyond the arithmetical calculations to which it was at first applied, that the great advances in pure mathematics, and the sciences depending on them, are to be attributed.

56 As abstract general terms are merely the names of sensible objects used tropically, they could not be considered as the representatives of any ideas in the mind, even though it were true that the words of a language, and not the mode of forming them only, might be regarded as the representatives of mental operations. The controversy between the realists and nominalists, of which we have given a short account in the last Chapter, could not arise at the present day; every one is now aware that words, as the signs of generalization, are the only objects about which general reasoning is conversant. If any question of this sort could be agitated at present, it must be one between the nominalism of Occam, or conceptualism as some might be pleased to call it, and the ultra-nominalism of the school of Hobbes, Horne Tooke, or Bentham. Some of these have gone so far as to seek for general truths in the words of a particular

language; but no one, now-a-days, would conversely assert the objective existence of general ideas, as something independent of the general terms which we use in reasoning.

It is true, indeed, that general terms presume generalization; it is true that there is such a thing as general, necessary, absolute truth, and that synthetic judgments *à priori* are possible; it is true that there are genera and species of things, and, in short, representative or abstract knowledge as opposed to perceptive or intuitive knowledge; but it is not true that, because we can abstract and generalize, therefore we have in our mind general abstract ideas or images of the absolute and unconditioned, still less that our general terms are representatives of such ideas, and least of all that such abstract ideas have an independent existence. As a great philosopher has remarked, in speaking of the metaphorical meaning of general terms, our necessities have obliged us to depart from the natural order of our ideas; we have been obliged to attach ourselves to one furnished by the occasions and accidents to which we are liable, and this order gives us not the origin of our notions, but the history of our discoveries*. To adopt the words of the same philosopher, there are two different kinds of ideas, — the real and the nominal. The nominal idea of a thing is but its definition; and thus a simple idea is only real, for it cannot have a definition, that is, a new simple idea cannot be raised in the mind by means of words. The nominal idea or essence of a thing is simply that quality or attribute which we remark in it as the point of similarity between it and other individuals which we class with it, and which is therefore the cause of its name. This definition, like all classification or naming, is of course to a certain extent arbitrary; for, as Dugald Stewart observes†, it does not necessarily follow that this quality is more essential to the existence of any thing as an individual than various other qualities which we are accustomed to regard as accidental. The real definition enables us to see the possibility of the thing defined, and it is this definition alone that can be made the basis of science, for which the nominal definition

* Leibnitz, *Nouveaux Essais sur l'Entendement Humain*, p. 324.

† *Elements*, p. 130.

is not sufficient, unless it can be shown by experiment that the thing defined is possible, in which case the definition becomes real. There is, perhaps, no such thing in the world as a perfect circle, but the definition of the circle enables us to see the possibility of the thing, and therefore the definition is allowed to rank among the first principles of the science of Geometry. The essence of a thing is but the possibility of it, and therefore does not depend upon ourselves; the merely nominal definition is arbitrary, and though there is but one essence, there may be several nominal definitions of the same thing, while the real definition must be justified by the reason, which shows that it is possible, or by experience, which shows that it actually is, and is therefore possible*.

57 The doctrines of the Realists in the middle ages seem to have been suggested by a misconception of the philosophy of Plato, which has prevailed to the present time†. It has been all along supposed that Plato was a realist in the strictest sense of the word, that he believed in the independent existence of universal ideas, that he had a great passion for the marvellous and mysterious, and so forth. We believe nothing of the kind. Plato may have been a bad citizen, — in his heart a traitor to his country; and an enemy to her institutions,—but he was not a mystical dreamer, or a wild enthusiast; he was the very greatest of all true philosophers, because he was the first; he was a sober, clear-headed thinker, and not the less so because he had the most brilliant fancy — a mind teeming with the most poetical imagery that ever gilded the page of abstract speculation. The business of philosophy, as we have before said, is to undress the objects of sense; to take the thought away from the particular, and turn it to the general. In the beginning of real philosophy this was the great thing to be done. The first philosophers, so called, were materialists and ultra-nominalists; and therefore it was Plato's object, as a true philosopher, to establish at least the position that truth and science cannot be found

* Leibnitz (*ubi supra*, pp. 252 foll.).

† It is perhaps right to make an exception to a certain extent in favour of Bishop Berkeley (see *Siris*, § 338).

in the individuals, but must be sought after by general reasoning; that we must take general terms, the names of classes and not of individual things, if we would arrive at any valuable conclusions. If he had written, as Dugald Stewart might have written, on the same theme in the nineteenth century, after the world had enjoyed for many hundred years the lights of philosophy, science, literature, and a true spiritual religion, he would have had no occasion to use allegories about chariots and winged horses, and ideas dwelling in the world of intelligence, and metempsychosis*, and so forth. But living as he did in an idolatrous country, where every association was opposed to abstraction, and the human soul made an image worship of its every thought, where there was no literature except poetry and annals, and these too read by few, he was obliged to set up idols against idols, to make the imagination, which had created all the elements of Greek polytheism, its own iconoclast in favour of a rival worship; and so he spoke of ideas as things real, objective, and independent, dwelling with God in the heaven of heavens, and making other things what they are by participation. Nevertheless, no one knew better than he did

* The allegory in the Phædrus is borrowed entirely from the circumstance, that, in the Attic dialect, words referring to the use of wings are employed to signify the emotions of the mind (see, for instance, Sophocles, *Ajax*, 693); a metaphor so obvious that Aristophanes makes a very lengthened joke upon it in the *Aves*, 1436—1450. If the reader wishes for an instance of the way in which Plato could spin an allegory from the common terms of poetical language, let him compare *Phædrus*, p. 251 A—D, where we have *πρῶτον μὲν ἔφριξε—οἶον ἐκ τῆς φρίκης—θερμότης—θερμανθέντος δὲ ἐτάρκη—ξεί οὖν ἐν τοῦτ' ὅλῃ, καὶ ἀνακκίζει—τῇ διεξόδῳ ἐγχεῖ ἐκαστῇ—ὥστε πᾶσα κεντουμενὴν κύκλῳ ἢ ψυχῇ οἷσθ' αἰ καὶ ὀδυνᾷται*, with Sophocles, *Trachiniæ*, 831 foll.:

εἰ γὰρ σφε Κενταύρου φονίᾳ νεφέλα
χρίει δολοποιὸς ἀνάγκη
πλευρὰ προστακέντος ἰοῦ

δεινотάτῳ μὲν ὕδρας προστειτακὼς
φάσματι;
ἄμμιγὰ νῦν αἰκίζει
ὑποφόνια δολόμυθα κέντρ'
ἐφ' ἑξέσαντα.

that this was but philosophy speaking in parables; as will appear from the consideration of a very few facts*.

58 Plato bases his whole system on dialectic or logic, the art of general reasoning. He knew that there could be no general reasoning leading to philosophy, or general principles, without real definitions. Now, the definition necessarily includes two things, generalization and division, or, in the words of modern logicians, it is made either *per genus* or *per differentiam*. The former process is the base of the second; the second is the development of the former. Accordingly, dialectic, and therefore philosophy, depend upon generalization; and Plato's theory of ideas, as it is called, is merely the assertion of the principle, that in order to general reasoning we must generalize and classify, *κατὰ γένος διακρίνειν* and *κατ' εἶδη σκοπεῖν*, which he explains very clearly in the *Phædrus* (p. 249 B): *δεῖ γὰρ ἀνθρώπου ξυνιέναι κατ' εἶδος λεγόμενον, ἐκ πολλῶν ἰν αἰσθήσεων εἰς ἓν λογισμῷ ξυναιρούμενον*,—and this we presume is now generally admitted†. It is strange that this should have escaped the notice of so many writers on the history of philosophy; one would have thought that the connexion between him and the Pythagoreans, who made the same use of numbers,—the first abstract terms in language,—which he did of his ideas, would have taught them that Plato's object was only to bring forward the principles of science or necessary truth, to draw the first outlines of a system of logic or general reasoning, by laying down the rules of classifi-

* See Cousin, *Nouveaux Fragmens Philosophiques*, pp. 160 foll.

† Professor Thompson, in his essay on the *Sophista* of Plato (*Trans. of the Cambr. Phil. Soc.* Vol. x. Part. i.), makes the following remarks on Plato's method of definitions: "Two methods are marked out (in the *Phædrus*) for the dialectician to pursue in searching for definitions. Either he may start from particulars and from them rise to generals: or he may assume a general and descend by successive stages to the subordinate species (the species *specialissima*) which contains the thing or idea, which he seeks to define. The first of these processes is styled by Plato *συναγωγή*, Collection: by Aristotle, *ἐπαγωγή*, Induction: the second is called by both Plato and Aristotle *διαίρεσις*, or the *διαιρητική μέθοδος*, Division or the Divisive Method. Whoso is master of both methods is styled by Plato a Dialectician, and his art the Art of Dialectic."

cation and generalization. His pupil Aristotle, who has grievously misrepresented his meaning, did but fill up his scheme*; and it may be shown from the words of both, that, in talking of genera and species, categories, and universals, they meant only general terms, the necessary instruments of reasoning, the main part of the definition real, which is perpetual because it speaks only of the possible†.

59 We need not search long in Plato's works without finding indubitable proofs of his nominalism, expressed in the most direct terms‡. For instance, in the *Republic* (x. p. 596A)

* In the paper just quoted Mr. Thompson says: "Aristotle objects to the term μέθεξις on the ground that it is metaphorical. Now as a logical term, the Platonic μέθεξις is but the counterpart of ὑπαρξις, the Aristotelian word denoting the relation of subject to predicate. The one term is as metaphorical as the other and not more so."

† Leibnitz, *u. s.* p. 254: *les Essences sont perpétuelles parce qu'il ne s'y agit que du possible.*

‡ Mr. Dyer in a paper *On the noun, or name, as an instrument of reasoning*, read before the Philological Society, 14. Jan. 1848 (*Proceedings*, Vol. III. No. 65), has combated this view of Plato's philosophy. He maintains that nominalism would have been totally inconsistent with Plato's particular tenets; that he was in fact a realist. But he admits that Plato's "realism did not prevent him from making use of general terms for logical purposes, precisely in the same way as the most thorough nominalist." He tells us too that "the germ of Plato's philosophy lies in the well-known passage of the *Phædrus* (245 D sqq.) in which the soul is likened to a yoke of winged horses;" and he maintains that "fanciful as this sketch may appear, it in reality contains the leading principles of the Platonic philosophy, such as we find them worked out in a more serious manner in the later dialogues." The question therefore between Mr. Dyer and ourselves lies within a very narrow compass. He admits that Socrates was a nominalist, and that Plato adopted the dialectic method of his master in a thoroughly nominalistic manner. Accordingly, it only remains that we should decide whether his idealism was a fanciful play with words and metaphors, which might be perfectly consistent with the merest nominalism: or whether a clear-headed man, who understood the meaning of a general predication in language, was so besotted in his word-worship that he was obliged to give an external and objective existence to the significance of every verbal abstraction. In spite of the vagueness of his poetical phraseology, it is sufficiently clear from the passages quoted in the text that Plato regarded the general term or name as the only result of abstraction.

he begins an investigation by taking the generic name (ὄνομα) as a representative of the genus (εἶδος, ἰδέα, which are in this passage used as identical words*) and states that this is his usual method — βούλει οὖν ἐνθίνδε ἀρξώμεθα ἐπισκοποῦντες, ἐκ τῆς εἰωθυίας μεθόδου; εἶδος γάρ πού τι ἐν ἑκάστων εἰώθαμεν τίθεσθαι περὶ ἑκάστα τὰ πολλά, οἷς ταύτων ὄνομα ἐπιφέρομεν — θῶμεν δὴ καὶ νῦν ὅτι βούλει τῶν πολλῶν. οἷον, εἰ θέλεις, πολλαὶ πού εἰσι κλίμαι καὶ τραπέσαι. — ἀλλ' ἰδέαι γέ που περὶ ταῦτα τὰ σκευή δύο, μία μὲν κλίμης, μία δὲ τραπέζης. And in the *Laws* (x. pp. 895, 6) he gives in plain words the distinction, which we have given above, between the name and the definition, the former being a *primā facie*, the latter a scientific classification, the former a nominal, the latter a real description: ἄρ' οὐκ ἂν ἐθέλοις περὶ ἑκάστων τρία νοεῖν; — ἐν μὲν τὴν οὐσίαν, ἐν δὲ τῆς οὐσίας τὸν λόγον, ἐν δὲ ὄνομα· καὶ δὴ καὶ ἐρωτήσεις εἶναι περὶ τὸ ὃν ἅπαν δύο. — τότε μὲν ἡμῶν ἑκάστων τοῦνομα προτεινόμενον αὐτὸ τὸν λόγον ἀπατεῖν, τότε δὲ τὸν λόγον αὐτὸν προτεινόμενον ἐρωτᾶν αὐ τοῦνομα. — ἔστι που δίχα διαιρούμενον ἐν ἄλλοις τε καὶ ἐν ἀριθμῷ. τούτῳ δὴ τῷ κατ' ἀριθμὸν ὄνομα μὲν ἄρτιον, λόγος δὲ ἀριθμὸς διαιρούμενος εἰς ἴσα δύο μέρη. — μὲν οὖν οὐ ταύτων ἐκατέρως προσαγορεύομεν, ἂν τε τὸν λόγον ἐρωτῶμενοι τοῦνομα ἀποδιδῶμεν, ἂν τε τοῦνομα τὸν λόγον, ἄρτιον ὀνόματι καὶ λόγῳ, δίχα διαιρούμενον ἀριθμὸν προσαγορεύοντες ταύτων ὄν; — ὅν δὴ ψυχὴ τοῦνομα, τίς τούτου λόγος; ἔχομεν ἄλλον πλὴν τὸν νῦν διηγήθέντα, τὴν δυναμένην αὐτὴν αὐτὴν κινεῖν κίνησιν; on which it is asked, τὸ ἑαυτὸ κινεῖν φησὶ λόγον ἔχειν τὴν αὐτὴν οὐσίαν ἣν περ

* When εἶδος and ἰδέα are distinguished by Plato, the former denotes the mental apprehension, and the latter its counterpart in nature. See Thompson's note on *Butler's Lectures*, II. p. 127. In common Greek ἰδέα means the outward form or manner of any thing, while εἶδος denotes the class or species. We have them both together in Thucyd. III. 62: ἡμεῖς δὲ μηδίῃ μὲν αὐτοὺς οὐ φαμεν, διότι οὐδ' Ἀθηναίους, τῇ μὲντοι αὐτῇ ἰδέῃ ὕστερον ἰόντων Ἀθηναίων ἐπὶ τοὺς Ἕλληνας μόνους αὐ Βοιωτῶν ἀπικίσαι· καίτοι σέψασθε ἐν οἷῳ εἶδει ἐκότεροι ἡμῶν τοῦτο ἔπραξαν. Here it is obvious that whether we take τῇ αὐτῇ ἰδέῃ with ἰόντων or with ἀπικίσαι, it means "in the same way or manner," *eadem ratione, auf dieselbe Weise*. But ἐν οἷῳ εἶδει must mean "in what kind of government," "in what specific form of constitution," *in qua reipublice formæ, in welcher Verfassung, in was für einer Stellung*; cf. VIII. 90, § 1: οἱ τῶν τετρακοσίων μάλιστα ἐναντίοι ὄντες τῷ τοιούτῳ εἶδει.

τοῦνομα ὃ δὴ πάντες ψυχὴν προσαγορεύομεν; and this is assented to. If we compare these two passages with those which we have quoted above from Occham, the chief of the Nominalists, we shall see that their opinions on the value of universals coincide*.

Plato, although no philologist, had convinced himself of the fact which philology has made certain to us, that although the structure of language is a counterpart of the organization of the mind, the individual words are only arbitrary signs, and therefore do not contain the truth of things. But the great talkers, by whom he was surrounded, and whose writings constituted the intellectual food of Athens, had arrived at the extremest point of ultra-nominalism, and had asserted that truth was to be found, not only in the fleeting phenomena of the visible world, but even in the individual words of a particular language. Plato is not to be charged with realism because he opposed this abuse of nominalism, any more than a man is to be considered an infidel who is opposed to the excesses of religious zeal. But he has been called so, because, as Aristotle says, those who are in one extreme of wrong, class in the opposite extreme of wrong all who hold to the golden mean of right.

60 The work in which Plato directly opposed the philological application of this ultra-nominalism, the *Cratylus*, was till very lately altogether misunderstood; we shall therefore give some account of it, and of the modern work which stands in prominent opposition to it, the *Diversions of Purley*, by John Horne Tooke, as well on account of the contrast between them, and our decided opposition to the latter, as because the serious truths for the first time announced in the *Cratylus*, its connexion with the rest of Plato's system, and consequently with that philosophy which is the beginning of human knowledge, have induced us to borrow from it the title of this book.

The utterly ridiculous and unjustifiable etymologies brought forward in Plato's *Cratylus*, and the strange mixture of joke

* We have elsewhere pointed out more fully the verbal and grammatical reasoning on which Plato's system depends: see *Penny Cyclopædia*. s. v. *Plato*, p. 236; *Literature of Greece*, II. p. 230.

and earnest which one finds in every page, formerly rendered this dialogue a great stumblingblock to all the admirers of the philosopher. They were generally unable to determine what place in Plato's works should be assigned to it, and what was its real object. At present, however, scholars are nearly agreed as to its general meaning. That Plato, whose main object was to establish a system of dialectics as a means of inquiring after truth, should have been ignorant of the importance and necessity of establishing the connexion between ideas and words, and should not have had some sober theory of language, the dialectician's instrument, cannot be believed. On the contrary, he seems to have been continually impressed with the conviction, that his chief business was to solve, in part at least, the problem of language, for he says that language is the counterpart of the mind (*Phædrus*, p. 276 A), and that the word-maker must have a dialectician set over him (*Cratyl.* p. 390 D). The great object of Plato in all his works was to lead the mind away from its continual attraction to objects of sense, to teach us, that, if we would find truth and science, we must ascend to laws or general principles, and not confine our attention to the multiplicity of facts and individual objects (or, as he expressed it in his poetical language, we must seek for them not in the world of matter, but in the world of mind, for the former contains only shadowy representations of the realities displayed by the latter), that there is something more in man than a mere congeries of recollected experiences, and that he ought to have higher thoughts and more exalted pleasures than those which the outward world can furnish. This is the substance of his arguments with his contemporaries, on all the great questions then agitated in philosophy, and it is well known that he thought banter and irony as good a vehicle as any other for his purpose. Accordingly, when he found that words, like other outward objects, instead of being considered as merely symbols of reasoning, were themselves made the objects of examination, as if truth and science were to be discovered in sounds and signs, which had no meaning, save as interpreted from within; when he found too that this examination was carried on in the most arbitrary and capricious manner, without any regard paid even to the most obvious principles of etymology, and solely for the purpose of supporting

some specific dogmas; he added to his works an exposure of these absurdities, which only differs from his other bantering treatises in having more ludicrous and extravagant theories to combat. The Eleatics and Heracleiteans in particular had made use of etymology to establish their contradictory positions, asserting that it appeared from the words themselves, the former that every thing was fixed and stationary (*ἵστασθαι*), the latter that every thing was in motion (*κινεῖσθαι*). This furnished an excellent opportunity for ridiculing the method of both, by showing that both their systems were alike demonstrable from etymology. The Cratylus who gives his name to the dialogue, was a disciple of Heracleitus, and, according to Aristotle* (or whoever is the author of the first book of the *Metaphysica*), Plato had, when young, some intercourse or acquaintance with him. The other interlocutor is Hermogenes, the brother of Callicles, who is introduced as a supporter of the Eleatic doctrines. When we remember how Protagoras, the Heracleiteans, and the Eleatics, are all introduced together in the *Theætetus*, and how in that dialogue Plato combats the two former sets of doctrines most especially, and in conjunction with one another, on grounds similar to those which he advances against Cratylus in this, we cannot avoid considering this treatise as a supplement to the *Theætetus*. The doctrines of Protagoras and Heracleitus coincided in many points, and particularly in their views on the nature of language; it is for this reason no doubt that Hermogenes, as the representative of the Eleatics, is made to speak contemptuously of the philological part of Protagoras's work, called *Ἀλήθεια* (*Cratyl.* p. 391 c), and the Homeric etymologies in this dialogue have been thought to be a hit at Protagoras; for it appears from the *Theætetus* (p. 152 e), that the disciples of Protagoras and Heracleitus supported by quotations from Homer the doctrine of the perpetual motion of things; also, as in the *Theætetus*, the Eleatics are treated with much more consideration, and all the weight of the ridicule is made to fall upon the representative of the Heracleiteans; the banter is carried to the

* *Ἐκ νέου τε γὰρ συνήθης γενόμενος πρῶτον Κρατύλῳ καὶ ταῖς Ἡρακλειτέοις δόξαις, ὥς ἀπάντων τῶν αἰσθητῶν αἰεὶ θεόντων καὶ ἐπιστήμης περὶ αὐτῶν οὐκ οὔσης, κ. τ. λ. Aristot. Metaphys. i. c. 6.*

greatest length, when Socrates tells Cratylus that he owes the absurd derivations which he brings forward, and to all of which Cratylus assents, to the inspiration which had come upon him from his morning's talk with Euthypron, a mad and ridiculous quack. The object of the Theætetus is to overthrow entirely the doctrines of Protagoras and the Heracleiteans, to show that the grounds of science are not to be sought in the province of the senses, that in fact science is neither perception nor right conception, nor even right conception combined with reasonable explanation. Now the second of the three things which science is *not*, namely, right conception, is one and the same thing with language*; and these sophists had actually made language an object of inquiry, as if science had been to be found in words: therefore it was necessary to show, not only that science was not identical with right conception, but also that there were no grounds of science in language, which, although intrinsically the same with right conception, was extrinsically so far different as to merit a separate investigation; this, however, could not well have been introduced as a digression into the Theætetus, and therefore the Cratylus was written as a distinct work supplementary to that essay. The general conclusion is given at the end of the dialogue (p. 439 A); that as words are merely the images of things, it would be much better, even if we could most perfectly learn the nature of things from their names, to make the truth a criterion as well of itself as of its image.

61 The celebrated work of Horne Tooke presents in many ways a striking resemblance to the sophistical philology against which the Cratylus was written. It was suggested more immediately by some legal quibbles originating in the author's trial for high treason, just as the sophistical play upon words seems to have been recommended as a part of the juggling rhetoric with which the Athenian pleaders threw dust into the eyes of the dicasts; and as Cratylus was a partizan of the materialism of Heracleitus and Protagoras, so Horne Tooke professedly adopts the sensualism of Locke. In his philological method too he nearly resembles those old etymologers; he endeavours to establish

* Schleiermacher, *Einleitung zum Kratylus*, p. 15.

his views by an examination of his mother-tongue, chiefly, if not entirely, unaided by a comparison of other languages. Of his fundamental error with regard to the parts of speech we have spoken in another place. His object is to establish nominalism in its lowest and worst form, as an instrument in the hands of materialism; he endeavours to show that, in the English language at least, all words, however abstract or general their present use may be, are ultimately traceable to a meaning derived from sensible impressions, and from this he concludes that these words must still be understood, not in their present metaphorical, but in their primitive literal sense, and consequently, that as words are the signs of ideas, and all words refer only to sensations, we have no knowledge but through our sensations. But, as Sir James Mackintosh somewhere asks, would it be just to conclude that, because all words seem to represent, originally, *visible* objects, there are no impressions of touch, smell, sound, or taste in the human mind? This author, however, has no deductions more unwarrantable in logic, or more truly conceived in the spirit of the old Sophists, than those in which he attempts, by twisting and materializing the meaning of some of our most abstract terms, to subvert the principles of our inner subjective morality. For instance, when he says, that "*truth* is nothing but what every man *throweth*; that there is no such thing as eternal, immutable, everlasting *truth*, unless mankind, *such as they are at present*, be also eternal, immutable, and everlasting; that two persons may contradict each other, and yet both speak *truth*, for the *truth* of one person may be opposite to the *truth* of another" (Vol. II. pp. 402, 3)—what is this but to reassert the old dogma of Protagoras, that the individual man is the standard of all truth (πάντων μέτρον ἀνθρώπος)? what is it but to leave us to the dreary conclusion, which the follower of the Sophists must needs be contented with, that he has no community either with men or with God, but remains, like another Prometheus, bound to the isolated and comfortless rock of his own personal consciousness, with all his social longings and irresistible first convictions preying like a vulture on his soul*?

* See Schleiermacher's remarks in the Introduction to his translation of the *Theætetus* (p. 172 ad fin.).

62 The *Diversions of Purley* still maintains its ground, censured by few*, and admired by many. To oppose the extravagant nominalism and false philology of that work, and others of a similar stamp, and to find the mean between an excess of philological speculation and the superstitious realism, which shrinks from all contact with philology,—this is the more general object of the following pages. We bring forward against vulgar materialism, a truer and more congenial philosophy; we oppose to a narrow induction drawn from a mixed, wavering, and still spoken language, the carefully collected results of the labours of three generations of scholars, applied to a language copious, fixed, and comparatively pure, aided by the lights of comparative grammar, of a new era of the history of philology; in a word, we oppose to chimerical conjectures the results of a science founded on facts. On the other hand, our careful dissection of the whole body of inflected speech will make it plain that, while words are merely outward symbols, designating certain notions of the mind, those notions do not stand related, in all cases, just as the words or inflexions which express them, and that we cannot by means of mere words convert into physical truth all that is logically and metaphysically true. It is time that some attempt should be made to show that the philosophy of language refuses its ministering aid both to gross materialism and to superstitious fancy, and that it stands forth as the chief confirmation of those systems, by which human reason contributes to the support of religion and morality. The word is destined to teach; let it cease to be the instrument of deception.

* A Dutchman, who seems to have anticipated Horne Tooke, was less fortunate in the result of his experiment: "Un certain Hollandaïs, peu affectionné à la religion, avoit abusé de cette vérité (que les termes de Théologie, de Morale, et de Métaphysique sont pris originairement des choses grossières) pour tourner en ridicule la Théologie et la foi Chrétienne dans un petit dictionnaire flamand, où il donnoit aux termes des définitions ou explications non pas telles que l'usage demande, mais telles que sembloit porter la force originaire des mots, et les tournoit malignement; et comme d'ailleurs il avoit donné des marques d'impiété, on dit qu'il en fut puni dans le *Raspel-huyss*" (Leibnitz, *Nouveaux Essais sur l'Entendement Humain*, p. 235). One might almost fancy that this was a description of our English etymologist, if the date and the punishment were more suitable.

CHAPTER IV.

THE ETHNOGRAPHIC AFFINITIES OF THE ANCIENT GREEKS.

63 Ancient Greece must not be isolated. 64 Origin of the human race in Armenia. 65 Primeval civilization. 66 Mankind first spread into Asia Minor, and then into Mesopotamia. 67 Widely-dispersed emigrations from the plain of Babylon. 68 Separation of the Aramæan and Iranian families in the vicinity of the original settlements. 69 True classification of the human race presumes an opposition between the central and sporadic branches only. 70 Old division according to the descendants of Noah's three sons—how to be explained. 71 Spread of the Japhetic or Indo-Germanic race. 72 Order in which this family entered Europe; (1) Celts, (2) Slavonians, 3 (a) Low Germans, 3 (b) High Germans. We trace them back to Asia in the reversed order. 73 I. Germans. (a) Low Germans. 74 Saxons derived from the Sacæ. 75 (b) High Germans. 76 Origin of the name *German*. 77 II. Slavonians. Their extensive diffusion. How connected with the Low Germans. Lithuanians and Scandinavians. Getæ and Daci. 78 Relations of the Slavonic and Teutonic tribes in general. 79 III. Celtic tribes. The two great dialects of the Celtic. Causes of the insignificant ethnical position of the Celts. 80 IV. Eastern members of the Indo-Germanic family. Irân defined. High and Low Iranians. 81 Median origin of the Hindus shown by their ancient name. 82 The Low German tribes also derived from Media. 83 Meaning of the term *Sanscrit*. 84 Antiquity of the Sanscrit language and literature. 85 The High German tribes connected with the Persians or High Iranians. 86 The Zend language a genuine remnant of old Persian. 87 V. The Latin and Greek languages. 88 The Pelasgian or common element in Greek and Latin was allied to the Slavonian. 89 The additional or distinctive elements were Lithuanian or Gothic in the Latin, and High German in the Greek language. 90 Ancient proofs of resemblances between the Greek and Persian. 91 The Greeks and Germans had many features in common. 92 Their characteristic designation may be traced in its course through Asia Minor and Eastern Europe. 93 Proper classification of the Scythians. 94 Influence of the Phœnicians on the early culture of the inhabitants of Southern Greece. 95 The name "Pelasgus" was not of Phœnician origin; but other names connected with the arts of ancient Greece may be traced to the Phœnicians. 96 Characteristics of Hellenism. 97 Differences of dialect due to the preponderance of Hellenic or Pelasgian elements respectively.

63 **B**EFORE we commence our researches in the Greek language, it will be as well to mention, for the information of those readers to whom comparative philology is a new subject, in what relation this language is supposed to stand in respect to the other languages which we are about to compare with it. The time is long past when we could surround Greece with a

Chinese wall*, and content ourselves with surveying only as much of its language, religion, and history as could be discovered within these arbitrary limits. We cannot now content ourselves with meagre disquisitions about Æolian or Dorian dialects, or vague stories of Pelasgian serfs and Egyptian invaders; we must look forth upon the great stage of universal history, and consider whether these Greeks may not have had some near relationship with those barbarians of Europe whom they enlightened by their genius, and with those barbarians of Asia whom they conquered by their valour; whether, in fact, this very distinction of barbarian, or other-tongued, be not after all the mere offspring of ignorance, which always perceives the different before it can recognise the similar. It is now incontrovertibly established that most of the inhabitants of Europe, and a great number of the most ancient and civilized tribes of Asia, speak, with greater or smaller modifications, the same language; and the time may perhaps come when it will appear as probable philologically, as it is certain historically, that every language in the world has sprung from one original speech.

64 If we collect into one focus all the scattered information respecting the birth-place of the human race, which we can gather from tradition, from physiological considerations, and from the exhaustion of contradictory hypotheses, we must feel convinced that man originated in the temperate and fertile regions which lie between the Southern extremities of the Euxine and Caspian seas. Independently of all special inductions, we should be inclined *à priori* to conclude, in accordance with the general and systematic arrangements which we notice in the procedure of creation so far as we are able to trace its successive stages, that the human race would not be planted upon the surface of the globe until life had become both possible and easy to a creature so endowed, until the earth had assumed its present, and, as we may conclude, its permanent form, until the conditions of soil, atmosphere, vegetable production, and animal life, to which our existence is still liable, had been established on their present footing. And it is

* Kruse's *Hellas*, Th. i. p. 395.

reasonable to think that man would be first cradled on some plateau, which,—while it was raised above the lacustrine impurities of the alluvial plains—was likewise free from an overgrowth of wood, and well adapted for the cultivation of those fruits and grasses, which furnish the necessary food of man. There is no region in the world, which combines all these recommendations so fully as the Armenian table-land lying to the South and East of Mount Ararat. All tradition points to this district. On the supposition that mankind originated there, we may harmonize every linguistic phenomenon, and explain every ethnographical fact. And the farther we depart in any direction, the greater are the difficulties in which we find ourselves entangled. As for those on the other hand, who, recognising Armenia as one birth-place of the human family, contend that man was created independently in different parts of the globe as they became favourable to his continued existence, we hold it sufficient to say that such an hypothesis is unnecessary, since the spread of population can be accounted for in a very satisfactory manner without the assumption of more than one starting point; and the differences of race, which we observe in different parts of the globe, are not differences of species inconsistent with one common origin. Besides, the hypothesis, that man was created at different times and in different parts of the world, would leave unexplained and inexplicable those proofs of an original identity of language to which philology is daily making additions of the greatest weight and importance. Nothing short of necessity should induce us to seek for an autochthony in different parts of the globe, which would break the ties of blood-relationship that bind all men together; and so far are we from being able to point out any such necessity in this case, that all the attainable evidence clearly points in the opposite direction.

65 We conclude then that the first family of men lived in the high but fertile country of Armenia, bounded to the North by the true temperate zone, which there coincides with the fortieth parallel of latitude. Little or no advantage is to be derived from fanciful speculations respecting the so-called “ages of the world,” whether, with the old mythology we speak of a golden,

silver, brazen, and iron age*, or, with Grimm, arrange the different developments of society according to periods of stone, brass, and iron†. Armenia was always a fertile and prolific country. It abounded in corn, wine, and oil, and in those animals which minister most directly to the comfort of man. We cannot doubt therefore that the first society of human beings, having every advantage of climate and situation, would make a rapid advance in all the arts of life, and would soon lay the foundations of civilization and citizenship. The earliest records of the Semitic race tell us of the use of fire‡, of the fabrications of metals§, of the computation of time||, and even of navigation¶. We read of cities built**, of fields cultivated††, of herds collected‡‡; and even the fine arts were not unknown; at least, these early men were able to accompany their native poetry with the sweet strains of instrumental music§§. We may derive a similar picture of established social relations and the adequate possession of material comforts from the linguistic records of Arian civilization|||. The names of kindred, in the oldest languages of the Indo-Germanic family, present to us, when traced to their origin, a complete εἰδύλλιον of family life in primeval Irân¶¶. The father is “the protector,” the mother “the arranger”—“die kluge, verständige Hausfrau,” as Goethe calls her***; the brother is “the helper,” the daughter of the house is called in relation to her brothers and sisters *sva-stri*,

* Hesiod, *ἔ. κ. ῥ.* 108—199; cf. Ewald, *Gesch. d. V. Isr.* i. pp. 305 sqq.

† *Gesch. der deutschen Sprache*, i. p. 3.

‡ This is implied in the name לָאֵלֹהִים i. e. the light or splendour of God (*Gen.* v. 15), if we seek its interpretation in the analogies furnished by the other names: see Ewald, *Gesch. d. V. Isr.* i. p. 316.

§ *Gen.* iv. 22.

|| On the analogy between ‘Hanok and Janus, and on the significance of the number 365 attached to the former name, see Ewald *u. s.* p. 314.

¶ A comparison of the name of יָרֵד *Jared* (*Gen.* v. 15), with that of the river יַרְדֵּן, *Jordan*, would seem to point to the first beginnings of sea-faring.

** *Gen.* iv. 17.

†† iv. 2.

‡‡ *Ibid.*

§§ iv. 21.

||| Max Müller, *Oxford Essays*, 1856, pp. 14 sqq.

¶¶ Albrecht Weber, *Indische Skizzen*, 1857, pp. 8 sqq.

*** *Hermann und Dorothea*, i. 22.

"the nearly related one," κοινὸν ἀντάδελφον κάρα*, but in regard to her functions she is *duhitri*, "the milkmaid," and, as has been well remarked, "it discloses a kind of delicacy and humour, even in the rudest state of society, if we imagine a father calling his daughter 'his little milkmaid,' rather than *sutâ*, 'his begotten,' or *filia*, 'the suckling†.'"[†] The family group thus brought before us is surrounded by all the adjuncts which can furnish us with a back-ground either of sedentary or active occupation. "The house," says Weber‡, "was secure, provided with doors. Carriages and boats served for conveyance over field and stream. The fields were equipped with ploughs. Barley and wheat supplied meal and bread. Clothes, domestic utensils, and weapons were there in abundance. Swords and spears, knives and arrows were manufactured of bronze. Intoxicating mead led to the merry song; large shells and reeds served for music. Battle was a delight, and the feeling of race so strong, that the word barbarian—the inarticulate speaker—was used even in that primitive age as a designation of the foreigner who spoke another language. The conquered enemy became a slave. At the head of a commonalty stood a ruler, protector, lord, the leader in battle and the judge in peace."

66 How many years elapsed before this first establishment of social life spread beyond the limits of Armenia, we have no means of guessing. But tradition distinctly tells us that primeval civilization first extended itself to Asia Minor, and afterwards to Mesopotamia. Thus the earliest emigrant is carried to Lydia§; and the city of Iconium|| in Lycaonia claims for its

* This is our interpretation of the word: *Journal of Philology*, Vol. II. p. 357. According to Müller *svasar* is "she who pleases or consoles," from *svasti*, "joy or happiness" (*Oxford Essays*, 1856, p. 16), and Weber (*Ind. Sk.* p. 9) renders it "the careful one," *die sorgliche*.

† Müller, *Oxf. Ess.* p. 16.

‡ *Ind. Sk.* p. 9.

§ The name יִי (Gen. iv. 16) seems to be only another articulation of יִי (Gen. x. 22); see Ewald *u. s.* p. 315.

|| Steph. Byz. s. v.: Ἰκόνιον, πόλις Λυκαονίας πρὸς τοῖς ὄρεσι τοῦ Ταύρου. φασὶ δ' ὅτι ἦν τις Ἀννακός, ὃς ἔζησεν ὑπὲρ τὰ τριακόσια ἔτη. τοὺς δὲ πέριξ μαντεύσασθαι, ἕως τίνος βιώσεσθαι. ἐδόθη δὲ χρησμός, ὅτι τούτου τελευ-

founder, Annacus, or 'Hanok, the first author of an improved calender. In Mesopotamia, again, we can trace the stream of primitive civilization, as it descended the Tigris, skirting the mountains of Kurdistan, until it established itself, in full-blown luxury, at Babylon on the Euphrates. These facts are supported by consistent tradition; but we might have inferred, from general considerations, that such was the case. It was likely that the first migrations from Armenia would spread towards the West, because Asia Minor was not only very accessible, but presented also the same conditions of soil, climate and elevation as the parent-country; whereas the rich alluvial plains of the "Two Rivers" would not at first invite those who had been accustomed to a higher region, a more moderate temperature, and a purer air. When, however, the change of abode had once taken place, it is easy to understand how the growth of wealth, the formation of mightier empires, and the erection of gigantic cities, with their usual accompaniments of tyranny and vice, would flow from the new practice of living in open plains, and from a superabundance of employment and of the rewards of industry.

67 So long as the primitive population of the globe was confined to Armenia and its two colonies in Asia Minor and Mesopotamia, we find no traces of any differences of nation or language. It was on the lower Euphrates that the multitudes became too numerous for the soil; and from thence they streamed away in successive parties, scattering their detached and isolated bands over the whole surface of the globe. Hundreds, nay, thousands of years may have passed away, while these emigrants were wandering farther and farther from home, and becoming more and more forgetful of the civilization and social enjoyments which they had left behind them. It is reasonable to suppose that many of them who set out on this dreary and endless journey had committed crimes which made them

τήσαντος πάντες διαφθαρήσονται. οἱ δὲ Φρύγες ἀκούσαντες ἐθρήνουν σφοδρῶς. ὅθεν καὶ παροιμία, "τὸ ἐπὶ Ἀννακοῦ κλαύσειν" ἐπὶ τῶν λίαν οἰκτιζομένων. And then he proceeds to connect this with a legend about the deluge of Deucalion. Meineke suggests *Νανναός*; but the old reading seems to be the best. See Ewald *u. s.* p. 314.

anxious to shun communion with their fellows, and many a Cain transmitted to his wandering descendants the indelible impress of degeneracy and sin. Not unnaturally those who went farthest would fare worst, except in those cases where the ocean interposed a barrier to all further progress, and where the stream of population was dammed up in some well-watered and fertile country, which soon brought man back to the city-life and social habits of his forefathers. Perhaps the earliest case of this kind was the empire of China. At a later period the narrow isthmus of Darien produced a similar effect in Mexico. In general, however, the dispersion went on widening itself, and men whose ancestors had been on the same footing in regard to speech, colour, and frontal development, became Mongols, Tungusians, Mantchoos, and Samoyeds in Asia; Finns, Lapps, and Euskarians in Europe; Negroes and Caffres in Africa; and Red Indians in America; to say nothing of the Papuans, the Tasmanians, and the more widely-scattered Polynesians.

68 Meanwhile, modifications were taking place nearer home. Close to the original birth-place of man, two sister-races formed themselves, with equal qualifications both of body and mind, and divided between them, in nearly equal proportions, the great work of developing the human intellect. The geographical line of demarcation, the boundary-line and wall of partition between their first abodes, is furnished by the mountains of Kurdistan and by the Persian Gulf. To the South and West of this, the Aramaic race occupied at a very early period Mesopotamia, Syria, Palestine, Arabia, Egypt, and all the North of Africa. To the East, the Iranian race was more slowly developing itself on the great Western plateau of Asia, from whence it sent off successively streams of colonists, who carried the original language and the original appetences for high mental cultivation into India to the South East, and round by the North coasts of the Caspian and Euxine seas into Europe. We are precluded by the nature of this work from considering all the questions in physical geography, psychology, and history, which are connected with the ethnology of these civilized races; and in the philological part of the question, on which alone we can enter, we are obliged to limit our investigations, as far as possible, to those

parts of the subject which are most immediately connected with the illustration of the Greek language in particular. But even with this restricted range of speculation, it will be necessary to engage in a survey which a few years ago would have been thought extravagantly wide and foreign to the main question. Accessions of knowledge bring with them expanded and comprehensive views. There was a time when it was perfectly natural to regard the varieties rather than the affinities of human speech. It was seen that there were differences; but the points of contact were unobserved. The time is rapidly approaching when the discrepancies will appear inconsiderable, and when the marks of a common origin and of a family-likeness will engross all our attention and interest.

69 At present, however, the languages of the earth are divided into great families, which present remarkable points of difference. Some years ago two eminent philologists concurred in recognising three great classes or families of languages. They are thus distinguished by A. W. von Schlegel (*Observations sur la langue et littérature Provençales*, p. 14): *Les langues sans aucune structure grammaticale; les langues qui emploient des affixes; et les langues à inflexions*; and this arrangement is adopted by Bopp (*vergleich. Gramm.* p. 112, 3) with the following explanation: (1) Languages with monosyllabic roots, but incapable of composition, and therefore without grammar or organization: to this class belongs the Chinese, in which we have nothing but naked roots, and the predicates and other relations of the subject are determined merely by the position of the words in the sentence; (2) Languages with monosyllabic roots, which are susceptible of composition, and in which the grammar and organization depend entirely on this. In this class the leading principle of the formation of words lies in the connexion of verbal and pronomial roots, which in combination form the body and soul of the language: to this belongs the Sanscrit family, and all other languages not included under (1) and (3), and preserved in such a state that the forms of the words may still be resolved into their simplest elements; (3) Languages which consist of dissyllabic verbal roots, and require three consonants as the vehicles of their fundamental signification: this

class contains the Semitic languages only; its grammatical forms are produced not merely by composition, as is the case with the second, but also by means of a simple modification of the roots.

More recently, it has been thought convenient to divide the known languages of man into five different groups or dynasties. (1) The Indo-Germanic, corresponding to the second family in the above classification. (2) The Syro-Arabian, corresponding to the third family. (3) The Turanian, or Ugro-Tartarian. (4) The Chinese and Indo-Chinese, corresponding to the first family. (5) The languages of Central and Southern Africa. We still prefer a tripartite division, which in effect is capable of further arrangement in two groups of languages; and we think that the following is the simplest nomenclature. The two groups may be called (A) the *central*, and (B) the *sporadic*. Group (A) contains (1) the Iranian languages, corresponding to the Indo-Germanic, or Sanscrit family; and (2) the Aramaic languages, corresponding to the Semitic or Syro-Arabian family. Group (B), or the sporadic family, includes (3) the Turanian, the Chinese, and all those other languages which were scattered over the globe by the first and farthest wanderers from the birth-place of our race. According to this arrangement, the first two families are classed together as constituting one group of languages closely related in their material elements, and differing only in the state or degree of their grammatical development. The third family stands by itself, as comprising all the disintegrated or ungrammatical idioms. By the researches of Dr. Prichard and others, approximations have been already made to the establishment of family affinities between the different members of this sporadic group of languages. At present, however, they must be regarded as belonging to a region of phenomena not yet completely explored by science, and surrounding like a cloud the clearly-developed and central mass of Aramaic and Iranian idioms.

According to a mode of classification which we have elsewhere introduced*, these central languages differ rather in regard to their state or condition than in regard to the materials

* *Muskil le Sopher*, pp. 3, 4. Above, §. 49.

of which they are composed. By the state or condition of a language we mean, as we have already explained the term, the degree of detriment which the cultivation of syntax has caused to its etymological structure. The old languages of the Iranian or Indo-Germanic family belong to the first and second classes mentioned above. The Aramaic, Semitic or Syro-Arabian idioms all belong to the third class.

70 The relations between the two great branches of the central mass of languages may be established by a theory resting on scientific inductions*; and the result is in close accordance with the ethnographical pedigree given in the tenth chapter of *Genesis*†. That ancient record divides the nations then known to the Israelites into three classes, derived respectively from the three sons of Noah,—namely,—Shem, Ham, and Japheth. But although the subdivision is formally tripartite, the slightest examination of the document will convince us that a more intimate affinity is presumed between the descendants of Shem and Ham, than between either family and the tribes which claimed a descent from Japheth. For example, the Arab tribes designated as Havilah and Sheba are derived from Shem as well as from Ham. In fact, as we have elsewhere said, the relationship between the Shemitic and Hamite nations is fully recognised, but the latter are described as the previous occupants of the different countries into which the Aramean tribes afterwards forced their way. To repeat what we have stated on former occasions‡, the diffusion of the Aramaic race seems to have been according to the following stages. After the aborigines of Armenia had extended their territory into Asia Minor, and while the

* On the Slavonians, as forming the point of contact between the Semitic and Indo-Germanic races, see our essay *On two unsolved Problems in Indo-Germanic Philology*, *Report of Brit. Assoc.* for 1851, p. 138. And compare Mr. W. K. Sullivan's paper *On the Influences of Physical Causes on Languages*, &c., *Atlantis*, Jan. 1850, p. 121.

† Rénan maintains (*Histoire des Langues Sémitiques*, p. 38) that the xth chapter of *Genesis* groups the different tribes not by race but by climate; that its basis is geographical and not ethnographical; that Japhet, Shem, and Cham represent three zones, the northern, the intermediate, and the southern; and that no one of these names can designate a race in the scientific signification which we give to that word.

‡ *Quarterly Review*, No. XLV. p. 173; *Maskil le Sophér*, p. 35.

population of Irân was beginning its development, two streams of population descended from the mountains; and, leaving the desert between them, founded, in Mesopotamia to the left and in Palestine to the right, wealthy and civilized communities, which cultivated at an early period all the arts of city-life and practised not a few of its attendant vices. From the left-hand colony, which included the empire of Nineveh, and subsequently that of Babylon, a further stream proceeded Southwards; and having on its way established the rich kingdoms of Havilah and Sheba in Arabia Felix, it ultimately carried its traditionary religion and social culture into Upper Egypt, where it came in contact with a kindred empire founded in Lower Egypt by those who had taken the right-hand course. All these great diffusers of sensual comfort and irreligious civilization are classed together in the Old Testament as *Hamites*, or descendants from Noah's godless son, and are opposed to the *Shemites*, that is, to the Hebrews, Assyrians, Syrians, and Arabians, who subsequently descended from the mountains of Aram. But there is every reason to believe that all these nations spoke languages which exhibited the same peculiarities, and differed only as dialects of the same idiom; and, as we have elsewhere shown*, their apparent trigrammatism, their etymological disintegration, and the tertiary condition in which their oldest remains are found, must be referred to the constant intermixtures, re-unions, and confusions produced by the emigrations and conquests of the different sections of this important family.

By means of a scientific analysis it is possible to point out the existence of monosyllabic roots in Hebrew and in the other Syro-Arabian languages no less than in the members of the Iranian or Indo-Germanic family (§209). But though we must not neglect the various contacts and affinities of the two branches of our first and central group, the present is not the proper occasion for a full discussion of the Semitic idioms; and we must content ourselves with a survey of the branch to which the Greek language belongs.

71 In describing the spread of the descendants of Japheth the Book of Genesis enumerates only those tribes whose settle-

* *Maskil le Sopher*, p. 36.

ments were in Asia Minor, in the South-eastern parts of Europe, and on the Mediterranean. The immediate offspring of Japheth, in other words, the main divisions in this family of nations, are the Cimmerians (*Gómer*), Scythians (*Mágóg*), Medes (*Mádaí*), Ionians (*Jáván*), Tibareni (*Tubal*), Moschi (*Meshek*), and Thracians (*Tirác*). Besides these, the Bithynians (*Ashkenaz*), Sarmatians (*Ríphath*), and Armenians (*Tógarmah*), are mentioned as sons of *Gomer*, or offshoots of the Cimmerii; and not only Hellas (*Helisháh*), but other places in the Mediterranean, with which the Phœnicians trafficked, even the distant Tartessus in Spain, are said to be peopled by sons of *Jáván*, or Ionians. This of course is a one-sided survey of the spread of this great family, though very valuable as far as it goes; and we must take a much more comprehensive view of the population of Europe, if we wish to understand the relation subsisting between the Greek language and the other members of the class to which it belongs.

This great class of languages, extending from India to the British Isles, has been called the Japhetic, Arian, Iranian, San-crit, Indo-European or Indo-Germanic family. We shall adopt the last of these names, because it points at once to the two most important branches of the family, the Indian and Teutonic languages, and is free from the vagueness which attaches to the term Indo-European; for there are languages in Europe which have no established affinity with this family. Besides, we believe that all the members of the family are deducible from two great branches corresponding to these, and the rigorous examination to which they, in particular, have been subjected, places them in a prominent position in regard to the other idioms, which are not only less important, but also less known.

72 If we consider the elements of the population of Europe, according to the order in which they were successively added to the first sprinkling of scattered Turanian tribes which they drove before them to the mountainous extremities of the continent, we can hardly fail to arrive at the following results. The first emigrants from Asia were sons of Gomer,—Celts and Cimmerians,—who entered this continent from the steppes of the Caucasus, and passing round the northern coasts of the Black

Sea, not only spread over the whole of Europe, specially to the South and West, but also recrossed into Asia by the Hellespont, and conquered or colonized the countries bordering on the South of the Euxine. The next invaders were the sons of Magog,—Scythians, Sarmatians, or Slavonians,—who are generally found by the side of the Celts in their earliest settlements. They more fully occupied the East of Europe, but though they contributed largely to the population of Greece and Italy, they do not appear to have spread beyond the Oder in the North, or to have established themselves permanently in the Alps, or in the Middle-highlands of Germany. The final settlement of Iranians in Europe was that of the Teutonic races, consisting first of the Low Germans, who, starting from the regions between the Oxus and the Jaxartus, burst through the Slavonians, and formally settled themselves in the Nord-west of Europe; and secondly of the High Germans, who subsequently occupied the higher central regions, having also contributed an important, and perhaps the most characteristic, element to the population of Hellas. In considering these tribes separately, we shall travel back to their original abodes in Asia, in an order the reverse of this, and shall take as our starting-point those who entered Europe last, and travelled farthest.

73 We begin, then, with the German languages, which are of the highest interest to us, because our own language in its fundamental element, and the oldest part of the Greek, to the elucidation of which our present efforts are mainly directed, belong to the oldest branch of this set. The German languages are divided into two great branches, usually known as Low German and High German. The former, which is the older, was spoken in the low countries to the north of Europe; the latter was the language of the more mountainous districts of the South: whence their distinctive names. There is every reason to conclude that the Low Germans entered Europe from Asia long before the High Germans, and that they were driven onwards to the north and east by the overwhelming stream of the subsequent invasion: this appears not only from their geographical position, but also from the internal evidences of relative antiquity, furnished by the languages themselves.

The Low German includes (1) the Scandinavian languages, Icelandic, Swedish, and Danish*; (2) the Low German dialects, peculiarly so called, Anglo-Saxon, Frisian, Flemish, and Dutch; (3) the old Gothic, or, as Bopp calls it, the German Sanscrit. We mention the languages in this order, namely, those farthest from Asia first, not only on account of the position, but also because the languages in their internal structure stand in this relation of antiquity.

74 With regard to our own language, the Anglian and Scandinavian elements have overpowered the Frisian. The Anglo-Saxon conquest of England was mainly effected by two great branches of the Saxon race—the Frisians and Angles. The former were more specifically termed “Saxons†,” but this was the general designation of all the Six Settlements. While therefore, with reference to the ultimate predominance of the Anglian branch, we rightly designate ourselves as English (Anglians), the Celts, whom the Teutonic invaders drove into the mountains, not unnaturally applied to their conquerors the name of Sassenach (Saxons), which included both the Frisians and the Angles. The Saxons, like the Germans, seem to have derived their names directly from Asia. A tribe of the Sacæ, who dwelt by the Caspian, and were therefore, as will be seen, Low Iranians, occupied Bactriana and the most fertile part of Armenia, and extended in a westerly direction towards the Euxine; they were called *Sacassani* (according to Pliny, *Hist. Nat.* vi. 11), and their country *Σακασσηνή* (Strabo, p. 511); and it is supposed by the most eminent antiquaries that these were no other than the *Saxones*, i. e. *Sacasunu*, or “Sons of the Sacæ.”

75 The High German is simply divided into three classes, or rather three stages of existence, the Old, Middle, and New High German. The latter, which took its origin in Upper Saxony, and which owes its present position, as the written language of all Germany, to the influence of Luther, who was

* The eastern affinities of the Scandinavians have been well indicated by Dr. G. W. Dasent in the Introduction to his *Popular Tales from the Norse*, London, 1851.

† See *Cambridge Essays*, 1856, pp. 45 sqq.

from Upper Saxony, is probably the modern representative of the language which was spoken on the confines of Upper and Lower Germany, and this may account for its presenting, in some degree, the combined features of the two sets of languages.

76 Many of the ancients believed that the epithet *Germanus*, Γερμανός, by which they described the cognate inhabitants of central Europe, was merely the Latin adjective, which denotes brotherhood and kindred*, and the Romans often indulged in a play of words arising out of this misconception respecting a renowned ethnical appellation†. We need not trouble ourselves with the conjectures of a period, when philology was non-existent, and when it was natural for proud and ignorant men to seek an interpretation of foreign words in the nearest corresponding sounds of their own language. It is desirable, however, to inquire into the origin of this celebrated name; and we hope to be able to show that it is not only an indigenous title, but that it was brought by the High Germans from their settlements in Asia, and left by them, both in itself and in a synonym, among their earliest European colonists—the Dorian Greeks. This latter part of the investigation we will reserve till its proper place, when we come to speak of the Persians and Greeks: in the mean time, it will be right to show that the name borne by all the Teutonic tribes was itself a Teutonic word.

In the valuable essay on the Germans, which Tacitus wrote as an *Excursus* or appendix to his *Historiæ*, we are informed that the name *Germanus* was originally confined to a particular branch of the Teutonic race (*nationis nomen non gentis*, c. III.), from which, like the Hellenic name in Greece, it spread by conquest or imitation, to the other neighbouring and cognate tribes. As warriors, the Teutons took particular pride in calling themselves emphatically “*men*.” According to Tacitus, they

* Strabo, 290: διὸ δίκαιά μοι δοκοῦσι Ῥωμαῖοι τοῦτο ἀπτοῖς θεῖσθαι τοῦνομα, ὥς ἂν γνησίους Γαλάτας φράζειν βουλόμενοι γνήσιοι γὰρ οἱ Γερμανοὶ κατὰ τὴν Ῥωμαίων διάλεκτον. We find a reference to this error of the Romans in Plutarch, *Marius*, c. xxxiv., where *Germani* as applied to the *Τεύτονες* is rendered ἀδελφοί.

† Quinctil. viii. 3, § 29: Cimbri hic fuit, a quo fratrem necatum hoc Ciceronis dicto notatum est, *Germanum Cimber occidit*. Velleius Paterculus, ii. 67: De *Germanis* non de *Gallis*, duo triumphant consules; where there is a double pun.

traced back their origin to *Mannus*, the son of *Tuisco*, the son of Earth, that is, to a brave warrior, the child of their aboriginal god of war. The three great divisions of the nation were referred to three sons of *Mannus*, from whom they were styled *Iscævones*, *Ingævones*, and *Herminones*, corresponding to the *Franks*, *Saxons*, and *Thuringians* of a later age. Whatever conclusion we may adopt respecting the origin and signification of the two former designations*, we can hardly doubt that the ancient name of the Thuringians, as given by Tacitus, is merely the compound *Herr-mann* augmented by a formative syllable: and both the modern and ancient title of the same tribe are combined in the name of the *Her-mun-duri*. We find the same element in the names of the *Ala-manni*, or "all men," and the *Marco-manni*, or "border-men;" and we can hardly doubt that as the term "*man*" is thus appropriated to the free Teutonic warrior, the word *Ger-man* is strictly analogous to *Gar-dane*, which we find in *Beowulf*, whether the first word signifies "a spear," or is merely the intensive participle *gar*, "quite, entirely†." In the latter case the *Gar-männer* might be defined, in a certain sense, as the γνήσιοι Τεύτορες; and though this would not justify us in considering the term as a foreign epithet imposed by the Romans, it might serve to confirm the view which we have elsewhere taken‡ of the old Roman name *Herminius*, namely, that this was a word of Teutonic origin.

* See Grimm, *Gesch. d. deutsch. Spr.* pp. 824 sqq. We believe that the element *Isk-* in *Iscævones* is identical with the significant syllable *Ask-* in the *Ash-kenaz* of *Genesis* x. 3, in the Phrygian *Ascanius*, and the ethnical names Πελ-αγός, *Oscus*, &c., and we think that the element *Ing-* is that which is found in the designation of the *Ang-li*. With regard to the letter *i* in *Isk* and *Ing*, it is worthy of remark, that though we use *a* or *e* in writing the words *Angles* or *English*, we speak of *England* as *Ing-land*, and this pronunciation is supported by the Runic inscriptions (*Cambridge Essays*, 1856, p. 43). Are the words *Mann-ing* and *Mensch* = *Mann-isk*, indicative of contacts between the *Germans* or *Männer* emphatically so called, and their neighbours the *Ingævones* and *Iscævones*?

† See the different opinions collected in Weishaupt's edition of the *Germania*, pp. 135 sqq. Grimm has lately added to these a Celtic etymology — namely, from *gairm*, plur. *gairmeanna* = *ruf*, *ausruf*, so that *Germani* = βόην ἀγαθοί (*Gesch. d. deutsch. Spr.* p. 787).

‡ *Varronianus*, p. 25.

On the whole, we feel disposed to consider the term *Männer* in general, and the compounds *Ger-männer* and *Herr-männer* in particular, as originally derived from the last, most concentrated, and most warlike invaders of Europe—the Thuringian or Eastern Teutons. But as they dispossessed or conquered and settled amongst the Slavonians on the one side, and the more nearly-related Saxons on the other, they imparted to the whole district the name which they brought with them from the mountains of Irân. In the time of Tacitus it is fair to conclude that, although the *Herminones* were the only pure High Germans, the two other representatives of the sons of *Mannus* were not free from many admixtures and contacts with these vigorous warriors.

77 The most widely-extended idiom of the Indo-Germanic family is the Slavonian: it is spread over a broad surface of Europe and Asia, from the Pacific to the Baltic, from the Adriatic to the Arctic sea. The different tribes who spoke this language were known to the ancients under the names of Rhoxolani*, Krobyzi†, Sarmatæ or Sauromatæ, Pannonians, Illyrians, and Veneti or Wenidæ: at present it is spoken in Europe by the Russians and Rusniaks, the Bulgarians, Servians, Bosnians, Dalmatians, Croats, the Wends and Sorbs in Lusatia and Saxony, the Slovaks in Hungary, the Bohemians, Moravians, Poles, and Silesians.

Closely connected with the Slavonian, but not so widely diffused, are the Lithuanian languages; this set comprises the Lithuanian proper, Lettish, and old Prussian. From grammatical considerations, which we cannot here enlarge upon, we have no hesitation in placing Slavonian and Lithuanian, the agreement of which is universally acknowledged, in the same class with the

* The Rhoxolani are mentioned by Strabo (pp. 114, 294, 306) as the last of the known Scythians. From them Russia derives its name. "The Finns distinguish the Muscovites by the name of Rosso-lainen, or Russian people, and call themselves and nations of their own kindred Suomalainen. The word Rosso-lainen, heard and written by a Greek, would be Rhoxolani" (Prichard, *Celtic Nations*, p. 16).

† The Krobyzi mentioned by Herodotus (iv. 49) are supposed to be the same with the Russian *Kriwizen*.

oldest Low German dialects. In fact, wherever the Low German has escaped the overruling influence of the sister Teutonic dialect, it has been placed in such close contact with the Slavonian, that it is often easier to pass from the Low German to the Slavonic form, than, from the former, to reproduce the High German. Of the Low Germans who were thus Slavonized, the Lithuanians were almost incorporated in the older race. The Scandinavian tribes, though they had escaped all direct contacts with their High German brethren, were much less tainted with Slavonism than the Lithuanians, and exhibited in as pure a form as possible the distinctive characteristics of their progenitors the Getæ or Goths. But the Gothic affinities of the Lithuanians have not been forgotten. Their proper name is *Samo-getæ*; and the Prussian branch of this tribe call their neighbours, the Polish Lithuanians, by the name *Gudas* or *Guddas*. Not to speak at present of their Asiatic abodes, we find the Slavonians and Lithuanians side by side on the very threshold of Europe. For we have no hesitation in recognising the Slavonian race in the original Thracians, and the Gothic name appears in that of the Getæ. Grimm has shown* that the neighbouring Daci may have borne the original name of their northern descendants, the Danes, who are an important scion of the Low German race.

78 If these opinions are well founded, we shall have no difficulty in settling the relations of the Teutonic and Slavonian tribes. The latter, it appears, originally occupied the greater part of Eastern Europe. They were first encroached upon by the Gothic or Low German tribes, who left them in uninterrupted possession of Thrace to the South and of Sarmatia to the North, but deprived them of all their central and western habitations. The High Germans finally pushed their way through the Low Germans, and, first occupying in force the eastern part of the district which had been already Teutonized, gradually extended themselves to the West, where they were assimilated more or less to the Low Germans who had gone before them. Along the coasts of the Baltic Sea and German Ocean, and in Scandinavia, the Gothic branch remained more or less independent of the other Teutonic race, but in Lithuania especially they were very

* *Gesch. d. deutschen Spr.* i. p. 192.

much influenced by their Slavonian neighbours. The High Germans had in some districts to give back what they had taken from the earlier tribes, especially in Bohemia, but to the West they carried forward their predominance till at last they crossed the Rhine, and bestowed the name of the Frankish confederacy on the most thoroughly Latinized of the Roman provinces. We may therefore say that the Lithuanians were Low Germans highly Slavonized; that the Scandinavians contained the Gothic element in its purest form; that the Saxons or *Ingæwones* were Low Germans untainted by Slavonism, and but slightly influenced by High Germanism; that the Franks or *Iscewones* were Low Germans, over whom the High Germans had exercised considerable control*; and that the Thuringians or *Herminones* were pure High Germans, in the full vigour of their active opposition to the tribes among which they had settled.

79 The Celtic nations, the claim of whose speech to a place in the Indo-Germanic sisterhood is now fully established†, appear to have been the oldest inhabitants of Europe, but, by the pressure of subsequent immigrations, they have been thrust out to the extreme corners of the continent; and Arndt has endeavoured to show that they were also connected, to a certain extent, with the Finns, the Samoiedes, and the Mongols, nations, like themselves, detrudd to the uttermost parts of the earth.

* It is worthy of remark that the Jutes, who settled in Kent, referred the foundation of their kingdom to a mythical *Æsc* (i. e. *Isk*); and few scholars will fail to recognise, in the dialectical synonyms *Hengist* and *Horsa*, the last faint traces of a combination or fusion of High and Low Germans, the two tribes represented being really the Frisians and Angles (see *Cambridge Essays*, 1856, p. 47).

† In spite of occasional outbreaks of the rash and unscientific speculation, which has too often been the characteristic of Celtic philology, the relations of the Gaelic and Cymric tribes, and the Indo-Germanic affiliation of these ancient and interesting languages have at last been brought under the control of a sober and accurate discussion. The admirable papers by Mr. Garnet (*On the Languages and Dialects of the British Isles*, Essays, pp. 147 sqq.), the *Grammatica Celtica* of Zeuss, and the useful little work by Roget de Belloguet (*Ethnogénie Gauloise*, Paris, 1858), have placed the whole subject within the reach of the general student of comparative Grammar. We have suggested some special combinations in the *Cambridge Essays* for 1856, pp. 33 sqq.

There are two great dialects of the Celtic, which are thus exhibited by the most recent writers on the subject*.

- (I) The Gallic or British, comprehending
 - (a) the Cymric or Welsh;
 - (b) the Cornish, which is extinct;
 - (c) the Armorican, or dialect of Brittany (Bas Breton).
- (II) The Gaelic (Gadhelic) or Erse, comprehending
 - (a) the Fenic or Irish;
 - (b) the Highland Scottish (Gaelic);
 - (c) the Manx in the Isle of Man.

From this enumeration it will be seen that the remains of the Celtic language are now found only in nooks and corners of western and insular Europe. But the same evidence which establishes the Asiatic origin of the sons of Gomer, proves also their original diffusion throughout the whole of this continent. Being, next to the Turanian tribes, the first inhabitants of this part of the globe, they were either absorbed or driven onwards by the subsequent streams of population. In Spain to the South-west, and in the North of Scandinavia, they were swallowed up in the more closely-packed Turanian tribes who preceded them in those directions. The Basque or Euskarian language, in particular, which still remains isolated in the North-west of Spain, may be called a Celto-Finnish language. In Gaul, however, and in the British Isles the Celtic element predominated over all preceding ingredients, and long kept itself free from subsequent admixtures. Indeed, Celtic tribes appeared among the Germans during the better known historical periods. The Marcomanni, a High German tribe, drove the Celtic Boii from the country, which, though since occupied by Slavonian *Czechs* (i. e. "those farthest in advance;" Dobrowsky, *apud Adelung, Mithrid.* II. p. 672) is still called the home or land of its original inhabitants (*Bohemia=Boien-Heimath*). The Gauls conquered from Slavonian and German tribes the fertile plains of Lombardy, and, spreading to the South-east, sacked Rome and plundered Delphi; and the oldest writing in the New Testament is an epistle addressed to a tribe of Galatæ, or Gauls, settled in the North of

* Meier's *Report to the Brit. Assoc.* 1847, p. 301.

Asia Minor. These migrations, however, are all to be referred to retrogressive movements of the unconquered Celtic tribes of the West. In general, the Celts do not appear as distinct nationalities in Asia or in the East of Europe, where they are assimilated to the Slavonians and German tribes who conquered them; and except in the regions already indicated, the Celts have disappeared in the ethnical masses which they immediately preceded or followed. The two great dialects of the Celtic—the Welsh and the Erse—exhibit differences corresponding to those between the High German and Low German, and may be distinguished by similar epithets as High and Low Celtic. We attribute this difference to the early prevalence of High German admixture in the case of the Cymric dialect.

These are all the European languages which belong to the great Indo-Germanic family, with the exception of the Greek and Latin, which we have purposely omitted, till after we have spoken of the Asiatic members of the family, which contribute so much to the accurate classification of the European idioms. Arguing from what we know of the etymology and grammatical structure of the languages we have mentioned, we should not hesitate to class together with the Low German in its oldest form the Low Celtic or Erse, the Lithuanian, and the Slavonic languages; and, with the Old High German, the High Celtic only. By this we mean, that, though all these languages spring from, the same Asiatic source, the idioms which we find in the extremities of Europe, in the peninsulas, and on the northern and western coasts, are due to tribes who entered Europe at an earlier period, and were driven onwards by subsequent emigrants; and we are able to ascertain from these languages themselves that such is the case.

80 If we turn to the Eastern members of the family, we shall easily find a rational explanation of this division. It appears, then, that the origin of these languages is traceable to Irân, a country bounded on the north by the Caspian, on the south by the Indian Ocean, on the east by the Indus, and on the west by the Euphrates. Within these limits were spoken, so far as we can discover, two languages which bore the same relation to one another that we recognise as subsisting between

Low and High German, a language analogous to the former being spoken in the North and East of the district, and one analogous to the latter in the South. Although the latter extended to the sea-coast, yet, as the inhabitants who spoke it were mostly mountaineers (*Herod.* i. 71), we are justified in adopting, as applicable to these two languages, the same distinctive epithets which use has conferred upon the two great divisions of the German languages; and we will call the southern High Iranian, the northern and eastern Low Iranian. The surrounding nations to the North and East belonged to the Turanian, or sporadic family; but, when the mighty people confined within these comparatively narrow limits had become too numerous for the country they lived in, the eastern and northern tribes sent off emigrations to the South-east and North-west, breaking through or driving before them the tribes by which they were hemmed in. Those, however, who went off to the North-west were more powerful or more enterprising than the emigrants who took a south-easterly course; for while the former carried the Low Iranian dialect over all Asia and Europe to the islands of the West, the latter mastered only the northern part of Hindostan, and perhaps also, to a certain extent, a few of the islands of Polynesia. The proof of this colonization of Europe and Northern India by the inhabitants of northern and eastern Irân, rests upon the agreement of the languages spoken by the oldest inhabitants of India and Europe, and on the obvious derivation of the names of the earliest tribes in both from the country which afterwards became Media. The former of these grounds confirms the other: for when we find that the ancient Indians spoke the same language with the Low German tribes in Europe, and that the names of both are derivable from the same district, we are forced to conclude that they are both the offspring of a people who dwelt in the country to which their names point, and spoke a language which was the mother of their sister-idioms.

81 And first, with regard to the Median origin of the old name of Northern India, it is to be observed, that, according to Herodotus (vii. 62), the Medes were in ancient times called *Arians* by all the world—ἐκαλέοντο δὲ πάσαι πρὸς πάντων

"Ἀγιοι. Now *âryas* is a Sanscrit word signifying "noble," "splendid," "well born;" and the Hindus applied this epithet to themselves in contradistinction to the rest of mankind, whom they called *Mlêchch'has**, just as the Hellenes distinguished themselves from the Barbarians (*Asiatic Researches*, vii. p. 175, and Schlegel, *Études des Langues Asiatiques*, p. 70). That this name bore the same signification out of India, appears from the fact, that those kings of Cappadocia who boasted of Median extraction, called themselves *Aria-rathes*; this is obviously the Sanscrit adjective *ârya-rathas*, "mounted on a splendid chariot," used as an epithet of warriors and kings, as *mahâ-rathas*, "mounted on a great chariot," is constantly applied by the oldest Indian poets (see e. g. *Bhagavad-Gita*, i. sl. 4, 6, 17, &c.). Moreover, the name *Ariana*, in ancient times, undoubtedly included the whole of the northern provinces of the Persian empire: even when Strabo wrote it extended over part of Persia, Media, Bactria and Sogdiana (p. 724, comp. Steph. Byz. s. v. "Ἀγιοι). This name appears as *Airaiênê* in the Zend books, and is now contracted into *Irân*, much in the same way as *Ayôdhyâ*, the name of the old kingdom of Râmas, is shortened into the modern *Oude*. The same name may be recognised in *Arya-âvarta*, "the country of the Arians," which is the classical name for the old country of the Hindus, and which is defined as lying between the *Vindhya* and "snowy" (*Himâlaya*) mountains, and extending from the Eastern to the Western Ocean†. This definition excludes the Deccan, or "country to the right" (*dakshina*); and the language of the country, its geographical features, its oldest traditions, and the physical characteristics of the inhabitants, sufficiently show that the Arians or Iranians entered Hindostan by the Panjab, and did not extend themselves far towards the South‡. To the present day, though the northern tribes of India speak languages more or less corrupted

* It has been suggested that the name *Belooch* is the modern representative of this epithet. It is written **البلوچ** in Abulfêda.

† *Arya-âvartah*: *puñya-bhûmir* (i. e. "the region of sanctity"); *madhyam Vindhya-Himâlayôh* (*Am. Cosh.* p. 66, Colebrooke). We may compare the description *puñya-bhûmir* with the epithet *vaêjô*, "pure," given to the Arian mother-land by the Medo-Persians (below, § 85).

‡ Schlegel, *sur l'Origine des Hindous*, p. 415.

from the Low Iranian or Sanscrit, such as the Bengálí and Hindostani, the southern languages are more akin to the Mongol idioms, which entered into the languages of middle and northern Asia*. The scenes of their oldest poems, the *Mahâ-bhârata* and *Râmâyana*, are generally confined to the neighbourhood of Delhi and Oude. In the latter, the exiled hero travels to the extreme South, where he finds, among other things, innumerable hosts of apes, who do him considerable service. We consider this fable as proving that there was a striking physical difference between the Hindus and the population of southern India in the very earliest times. It appears that the aborigines of India, whom the Hindus or Arians invaded and conquered, had most of the characteristics of the negro tribes: at least, the supposed remains of these earliest inhabitants, still found in the North of India, have woolly hair, low foreheads, and flat noses. We venture, then, to conclude that these "apes, with foreheads villainous low†," were merely the ill-formed natives of the South‡, who appeared to the handsome and well-proportioned Hindus as little better than monkeys, just as the Greeks described the negroes of Africa as Pygmies or Cercopes, because they differed in form and stature from themselves, or as Virey would class the Hottentot with the baboon§.

82 Secondly, as to the Median origin of the Low German tribes, the following examples may suffice. That the Medes extended themselves to the North-west appears from the position

* Mr. Caldwell (in his *Comparative Grammar of the Dravidian or South-Indian Family of Languages*, London, 1856) says, "the Dravidian languages are to be affiliated, not with the Indo-European, but with the Scythian group of tongues; and the Scythian family, to which they appear to be most closely allied, is the Finnish or Ugrian." See also Norris' Scythian text of the Inscriptions at Behistun, *As. Soc.* Vol. xv.

† *The Tempest*, Act iv. Sc. 1.

‡ In the Gem, a copy of which Schlegel has prefixed to his edition of the *Râmâyana*, the attendant apes of Râma appear as men with the faces and tails of apes.

§ Hamaker (*Akadem. Voorlezingen*, p. 9) considers the *Râmâyana* as a poetical description of the complete triumph gained by Brahmanism and its votaries over the autochthones of India, who had sought a retreat in *Lanka*, or Ceylon.

of Media in the historical ages. The names of many of the Low German nations point to a derivation from the north of Irân. We have seen that the Saxons or *Saca-sunu* are traceable to Bactria. The Sarmatæ or Sauromatæ, an old Slavonian nation, are expressly mentioned as descendants of the Medes (Plin. *Hist. Nat.* vi. 7: *Sarmatæ Medorum, ut ferunt, soboles*. Diodor. Sic. ii. c. 43, p. 195, Dindorf: δύο δὲ μέγιστας ἀποικίας γενέσθαι, τὴν μὲν . . . τὴν δὲ ἐκ τῆς Μηδίας παρὰ τὸν Τάναϊν καθιδορυθεῖσαν, ἧς τοὺς λαοὺς Σαυρομάτας ὀνομασθῆναι): and their name indicates that they too claimed the North of Media as their father-land*. The Sigynnæ, whose territory extended from the north of the Danube to the country of the Heneti or Veneti (Slavonian Wends), on the Adriatic, in dress resembled the Medes, from whom they derived themselves; "how they could be colonists of the Medes," adds Herodotus (v. 9), "I cannot understand; but any thing may happen in the long course of time†." Now the abode which Herodotus assigns to the Sigynnæ falls within the limits of the Sauromatæ, who were a Slavonian tribe, and also derived from the Medes. Accordingly, the Sigynnæ must have been themselves Slavonians, and could not have been connected with the Huns, as some suppose. Besides, Strabo describes the Sigynnæ as living near the Caspian, with habits similar to those which Herodotus ascribes to them (p. 520). Therefore, we cannot doubt that they were a low Iranian people. In the same manner we might

* Böckh, *Corpus Inscript.* ii. p. 83: "Sauromatæ, Slavorum haud dubie parentes, . . . e Media immigrarunt ad Tanaim (Diod. II. 43, extr. Plin. *H. N.* vi. 7), unde Gatterer (*Introd. in hist. univ. Synchron.* T. i. p. 75) nomen derivat a Matenis s. Matienis s. Medis et voce Lithuanica *Saure*, quæ septentrionem designat: ut Sauromatæ sint *Medi Septentrionales*. Idem recte visi sunt *Syrmatæ*, quos Plinius prope Oxydracas Indo vicinos collocat (cf. Ritter, *Vorhalle d. Gesch.* p. 283) et eodem nomine Scylax ad Mæotidem. Mox vero Sauromaticæ gentes latius evagatæ sunt."

† γένοιτο δ' ἂν πᾶν ἐν τῷ μακρῷ χρόνῳ. Valckenaer quotes Soph. *Aj.* 655. for a similar sentiment. He might have said more aptly that Herodotus was almost repeating *Philoct.* 306: πολλὰ γὰρ τάδε ἐν τῷ μακρῷ γένοιτ' ἂν ἀνθρώπων χρόνῳ, and γένοιτ' ἂν πᾶν is also Sophoclean; cf. *Aj.* 86: γένοιτο μὲν τὰν πᾶν θεοῦ τεχνωμένον. That Herodotus often quoted Sophocles we have endeavoured to show elsewhere (*Proceedings of the Phil. Soc.* Vol. i. p. 164).

point out traces of a North Iranian pedigree in the case of every nation of the Low German class of which any mention is made by ancient writers. We consider even the invasions of the Scythians by the Persians, mentioned by the Greek historians, as traditions of the pressure of the High on the Low Iranians; for the identity of the names Scythians, Getæ, Jutes, and Goths, has been long recognised.

The argument from the language is decisive of the whole question. The resemblances between the old Low German dialects and the Sanscrit, even after a separation for thousands of years, are so striking that an eminent philologer has remarked that "when he reads the venerable Ulphilas he could believe he was reading Sanscrit*." On the whole, then, we consider it as nearly certain that the Hindus in India and the Low Germans in Europe are emigrants from the country about the southern extremity of the Caspian sea. We do not pretend to say when the emigration took place, nor do we suppose that it took place at once. As the population became too numerous for the country, or as they were pressed upon from without, they would naturally send off streams of invaders to the right and left in search of other settlements.

83 The term *Sanskrit*, by which we distinguish the old Iranian idiom that formed the basis of the North Indian and Low German dialects, is an epithet used by the Brahmins to designate the language in which their books of law and religion are written, the depository of their ancient poetry and philosophy; it implies that this language possesses all its flexions and grammatical forms, that, in fact, it is removed from the corrupting influences of every-day use. The original word *San-s-kṛita* is a compound: the first syllable is the preposition *sam*, "with," (σύν); the second, the passive participle *kṛita* (-tas, -tā, -tam), of the crude verb *kṛi*, "to make" (*creare*, *ceremonia*, ποιῶ); and a silent *s* is interposed; its literal meaning is "done, made, or formed completely" (*con-fectus*), "perfect," "highly polished,"

* Bopp, *Conjugationssystem der Sanskritsprache*, Frank. 1816. Vorrede von Windischmann, p. x.: "Der Verfasser sagt (in einem Briefe) er glaube Sanskrit zu lesen, wenn er den ehrwürdigen *Ulphila* lese."

"regularly inflected," "classical*." This epithet seems to have been applied to the old language of Northern India to distinguish it from another class of old languages not so elegant and complete, called the *Prâ-kṛita*, a word composed in a similar manner, and signifying "low," "vulgar," "common†." In fact, there are three divisions of the written languages of India; these are, to use the words of Colebrooke (*Asiatic Researches*, Vol. VII. p. 209, Engl. reprint), "(1) *Sanskrit*, a polished dialect, the inflexions of which, with all its numerous anomalies, are taught in grammatical institutes. This the dramatic poets put into the mouths of Gods and of Holy Personages. (2) *Prâkrît*‡, consisting of provincial dialects, which are less refined, and have a more imperfect grammar. In dramas it is spoken by women, benevolent genii, &c. (3) *Mâgadhi*, or *Apa-bhrançā*, a jargon destitute of regular grammar. It is used by the vulgar, and varies in different districts: the poets accordingly introduce into the dialogues of plays a provincial jargon spoken by the lowest persons in the drama." The word *apa-bhrançā*, derived from *bhraç*, "to fall down," signifies a word or dialect which has fallen off from correct etymology; the native grammarians use it to signify "false grammar," as opposed to Sanskrit, in the sense of "duly formed," "regularly inflected." The force of the grammatical term Sanskrit as a name for a sacred language will be duly appreciated by all who know that the old gram-

* On the meaning of this term see Pott s. v. *Indogerm. Sprachst.* p. 34, Hoefer, *de Prakrita Dialecto*, § 1.

† Compare Hamaker, *Akadem. Voorlezingen*, p. 213.

‡ For the various meanings of the word *Prâkrîta*, see Lassen's *Institut. Ling. Pracrit.* pp. 23 sqq. The signification of the term, according to its etymology, is "derived," i. e. from the Sanskrit; but, as we have mentioned in the text, this name does not correspond to the facts. Vararuchi treats of four kinds of *Prâkrit*, and there are three forms used in the Indian dramas. The heroine and principal female characters speak *Saurasênî*, the royal attendants speak *Mâgadhi*, and servants, &c. speak *Ardha-Magadhî*, "half Magadhî" (Wilson, *Hindu Drama*, p. 68; Lassen, *Inst. Pracrit.* p. 28; *Ind. Alterth.* II. 506). The *Saurasênî* has the greatest claim to be considered the language of the country in which the drama arose, and Krishna, who stands in intimate connexion with the origin of the drama, was specially honoured in this district. Arrian, *Ind.* VIII. 5; Lassen, *Inst. Pracrit.* pp. 35, 37; *Ind. Alterth.* I. 616, 625; II. 507.

marian Pânini was esteemed as a sort of demigod, and was said to be grandson of the inspired legislator Dêvala; and its application from the description of the kind of language to the designation of a particular ancient language is perfectly analogous to the use of the word *gramatica* by the early Italian writers to signify the Latin language: thus Boccaccio (*Decam.* vii. 6) describes a good Latin scholar as *un gran valentuomo in gramatica*, and Varchi gives the following distinction (*Dialogo sopra le lingue*, p. 335): *Tutte le lingue, che non sono Latine o gramaticali, si chiamavano e si chiamano volgari*. In the same manner the classical schools in this country are technically designated as *grammar* schools. The meaning of the term *Sanskṛita* is plainly implied in what Dante says (*Convito*, i. c. 5, p. 21): *il Latino è perpetuo e non corruttibile, e il Volgare è non istabile e corruttibile*.

84 Reverting to the doctrine maintained in the preceding chapter, we may be surprised to find that any language laying claim to great antiquity and to an early application of the art of writing, should deserve the title of *Sanskṛita*, or “regularly inflected.” The oldest form of Sanscrit, that which is found in the Vêdas, is very like that of the ancient Persian as it has been recovered from the Cuneiform monuments; and it is highly probable that the Brahminical people who spoke this language were not the first of those Arians, who descended into the plains of Delhi from the Himalayas or the Panjab; but that, on the contrary, the peninsula had long before been occupied by a cognate tribe, who eventually adopted the faith of Buddha, and whose ordinary language, the Prâcrit or Pâli, is always recognised in the oldest inscriptions. It has been maintained by Weber (*Vâjasaneyâ Sanh. Spec.* ii. p. 203) that the Sanscrit never was the language of an entire population, but that it was limited to a learned class, who formed it from the Vêdas. But the general tendency of modern researches is opposed to this hypothesis; and it seems to be clear that, however different the style of the ordinary spoken language may have been from the written and poetic diction of the sacerdotal Brahmins, the forms and inflexions of the language must have been the same in both, and that the *Bhâshâ* or ordinary discourse of the Brahminical or

later Arian invaders of India, which Pânini opposes to the *Ch'andas*, "metre," or *Rik*, "hymn," of the Vêdas (see Boehtlingk's edition, II. p. 523), differed from the latter rather in the diction or form of expression than in the furniture of words, or *κατασκευή*, as the Greeks significantly called it. It is true that the pure Sanscrit of the conquerors, instead of becoming the prevalent idiom, like the Attic Greek, the Tuscan Italian, the Castilian Spanish, and the new High German, gradually shrank within narrower limits, and constituted itself, like the Latin of the middle ages, the dialect of the Brahminical aristocracy (Lassen, *Ind. Alterthumsk.* II. p. 1152); and that as the Protestants opposed themselves to the Catholic hierarchy by adopting the vernacular in opposition to the learned language, as a medium of communication in spiritual matters, so Açoka and the other Buddhist kings adopted the popular language on their coins and in their inscriptions, as an obvious instrument in furtherance of their anti-sacerdotal innovations. But this proves nothing more than the distribution of dialects in the plays; it merely shows that the language of the priests and of the people had become as different as it was in mediæval Europe, and that the Brahminical conquerors from the north-west spoke a language in an older or more etymological condition than that of the Sauraseni and the other cognate tribes, who had previously established themselves to the south of the Himâlayas. If this was the case, it would be a reasonable inference that the Brahminical conquerors derived from these older Hindoos the original basis of the *Devanâgarî* character, in which they recorded their own traditions and mythology, and which those more ancient Arians had borrowed from the Semitic inventors of the syllabarium. But it is inconsistent with the rules of a scientific philology to assume that the more perfect Sanscrit has been made by refinement out of the less regular Pâli, or that the language of the Brahmins is more recent than that of the Buddhists*, because the older alphabet does not contain all the letters necessary to express the characteristic word-forms and

* Hodgson, *As. Soc. of Bengal*, VI. p. 682, has shown that probably the Buddhist doctrines were drawn up in Sanscrit, though the practical teaching of the priests was in the ordinary language of the country.

syntax of the Sanscrit*. The following appears to us the only sound theory derivable from the premises. Every argument that is adduced to prove that the Prâcrit, Pâli, and other Magadhî dialects were connected with literature at an earlier period than Sanscrit, tends to show—not that these languages are more ancient, or are found in an older condition than the Sanscrit,—but precisely the reverse, namely, that these are dialects of the Sanscrit in a secondary state as far as their structure is concerned†. And though the first Arian inhabitants of India may have used the art of writing for a much longer period than the Brahminical tribes, this is rather in favour of the belief that the Sanscrit and Vaidic poems belong to that more ancient species of literature which is preserved in the memory of a literary caste long before the invention or common use of an alphabet. And we are disposed to think that the learned grammarians of Malwah and Pataliputra, and especially the artificial school of King Vikramâditya's court, were for many years engaged in an office not unlike that of the learned men of Athens and Alexandria, who, from time to time, put together and published the scattered lays of the Homeridæ.

But although we have no good reason to doubt the great antiquity of the Sanscrit language, and though the writings in which it is contained are the modern representatives of a school of hymnic, epic, and didactic poetry, probably older than the earliest specimens of Greek literature, we must not suppose that it was, as we have it now, the same old Iranian idiom which was taken into Europe; on the contrary, it bears evident marks of those changes which long usage introduces into every language, and which have not operated to so great an extent in some of the sister-tongues of Europe, for instance, in the Low German, Latin, and Greek. However, as we do not possess any memorials of the primeval language from which it sprung, although we might

* This seems to be the view adopted by Colonel Sykes in an elaborate paper "On the religious, moral, and political state of Ancient India," which appears in the *Journal of the Royal Asiatic Society*, 1841, No. XII. pp. 248—484. See especially pp. 272 and 411 sqq.

† See Rawlinson, *Journal of R. As. Soc.* x. part 1. p. 41; Dr. Max Müller, *Report of Brit. Assoc.* 1847, pp. 321, 326.

be able, from a comparison of all the languages of the family, to make a probable reproduction of its grammatical system, and as the Sanscrit does present most remarkable correspondences with the oldest European languages of the Indo-Germanic family, we must be content to take it as the representative of the old Low Iranian, and therefore in the following pages have made more use of it than of any other language of this family in our endeavours to restore the oldest forms of Greek words.

85 When history tells us that the Median empire was overthrown by the Persian, this is a distinct announcement of the fact, which we might derive from philology alone, that the Southern tribes of Germanii or High Iranians pressed upon and mastered the Low Iranians, who are known to us as Medes in their Arian home, and as Sauromatæ, or northern Medes, in Europe. The establishment of the kingdom of Cyrus was in fact the final development of a tendency which had continued to exhibit itself in the same manner for many centuries previously; and in this we must recognise the counter pressure by which, as we conceive, the streams of emigration to India and Europe were increased. We have stated that the Medians or Low Iranians, spoke the primeval tongue of which the Indian Sanscrit is an offset, and which forms the distinctive element of those European dialects which are connected with the Low German and Slavonian. There is reason to suppose that the Low Iranian emigration entered Europe by the North of the Black Sea, that is, from the original abode of the Median race, the *Airyanem vaêjô*, "the pure Arian land*," in Bokhara, from which they had descended to Khorassan on their right, and to the *Hapta-Hindu*, or Punjab, on their left†; whereas the mixed tribes of the South and West, or those in which the Persian element predominated, must have extended themselves through Armenia into Asia Minor. Not only the geographical position of the country, but a singularly interesting tradition‡, seems to prove

* See Haug, *apud Bunsen, Ægypten*, V, a, p. 126.

† Id. *ibid.* pp. 119 sqq.

‡ It is a tradition, which cannot be easily set aside, that the singular story in Plato's *Republic*, p. 614 B sqq. was due to Zoroaster (Clem. Alex.

that the province of Armenia, which, as we have intimated, was probably the first seat of the whole human race, must also have been the first stage in the journey of emigration for all the Iranian tribes which started from the south and west of the Caspian. In its present state the Armenian language cannot be traced farther back than the fourth century A.D.; but even in its modern form it yields to a philological analysis the most convincing proofs of its Indo-Germanic structure, and the scattered notices in ancient writers show that it must have been one of the Medo-Persic idioms. At the commencement of the 4th century B.C., the country people in Armenia understood Persian*, and their deities bore Persian names†. According to Herodotus the Armenians and Phrygians were closely allied in origin, though he probably inverts the fact when he calls the former a colony of the latter. And the scanty remains of the Phrygian language admit of immediate comparison with the Persian as well as with the Armenian‡. The Cappadocians, who have many affinities with the Medo-Persians§, are said to have spoken the same language as their neighbours the Armenians||. On the other hand, the Sauromatæ, who, as we have seen, were of Median origin, have many Armenian affinities¶. Finally, it has been shown that some of the oldest European languages correspond to the Armenian in many terms, which have no longer their counterparts in the conterminous idioms, and that even the ancient Etruscans, whom we have identified on other grounds with the oldest

Strom. v. p. 710, Potter), and we have shown in a special communication to the *Cambridge Philosophical Society* (21 Febr. 1859) that it must have been derived by Plato from Heracleitus, whose philosophy was Zoroastrian (see Gladisch, *Herakleitos und Zoroaster*, Leipzig, 1859). Now the author of this apologue is called Ἡρὸς ὁ Ἀρμενίου τὸ γένος Παμφύλου; and this can only mean that the Arians, as they appeared in Pamphylia the most, western province of Persia, called themselves descendants of the Armenians.

* Xenophon, *Anab.* iv. 5, § 34: ἀνηρώτων τὸν κωμάρχην διὰ τοῦ περσικοῦ ἐρμηνέως τίς εἶη ἢ χάρα· ὃ δ' ἔλεγεν, ὅτι Ἀρμενία.

† Gosche, *de Ariana linguæ gentisque Armeniacæ indole*, Berolini, 1847, pp. 8 sqq.

‡ vii. 73.

§ Gosche, l. c. pp. 55, 56.

|| Moses Chorenensis, l. 13.

¶ Windischmann, *die Grundlage d. Armenischen im Arisch. Sprachstamme*, p. 14.

branch of the Low Iranians*, were connected also with the Asiatic Thracians, the Phrygians, and the Armenians†.

When these Persians, or High Iranians, had intruded themselves upon the Medes, or Low Iranians, it is probable that the language of the latter became tinged with the peculiarities of the Persian idiom, which was, however, nearly related to the Median, and the mixed language constituted the speech of those Persians with whom the Greeks had so much to do. The connexion of modern Persian with modern High German, even after many centuries of Arabian rule and the loss of its inflexions, was long ago perceived; and in one of the tribes of the Persians, the *Γερμανοί* mentioned by Herodotus (i. 125), we still recognise the distinctive name of the Thuringians or Herminones. We assume, therefore, that the High German dialects of Europe are due to a final Iranian emigration connected with the early expansion of the Persian race. And thus if all the European members of the family can be assigned to the two divisions of Low and High German, the former derived from that old Iranian stock which gave to India its sacred language, the latter from the great race of Persians or Germanians, the name Indo-Germanic, which has been given to the family, is doubly appropriate.

86 The opinion once entertained by the majority of English orientalists, that the Zend language, namely, that which is found in the sacred books obtained by Anquetil du Perron from the Parsis of Gujarat, is not a genuine dialect, but an artificial and fabricated idiom‡, or at best a corrupted Sanscrit,

* Varron. pp. 68 sqq.

† Ellis, *Connexion of the Rhetians and Etruscans with the Thracians*, *Journal of Philology*, II. pp. 1—20, 169—185; *Contributions to the Ethnology of Italy and Greece*, Lond. 1858.

‡ Colonel Vans Kennedy went so far as to assert that the Zend and Pehlvi are mere jargons made up of other languages (*Asiat. Journ.* Vol. xxvi. Part I. p. 100); the late Dr. Leyden, Mr. Erskine, and Professor von Bohlen, of Königsberg, supposed that the Zend is genuine indeed, but only a dialect of the Sanscrit, like the Prâcrit, or Pâli (the sacred language of the Buddhists); and Mr. Romer, in a paper read before the Asiatic Society (*Journal*, IV. p. 363), says, "it appears to him far from

has been abandoned of late years by all scientific philologists. Rask was the first to show that Zend is as much entitled to take its place among the primitive languages of the Indo-Germanic family as the Greek, the Lithuanian, or the Sanscrit, and that the Avesta must have existed in writing previously to the time of Alexander the Great*. The late Eugène Burnouf submitted the text of the *Yaçna* to a minute grammatical analysis, and completely established the independent character of the Zend language, and its great philological value; and he was followed by Bopp, who included the language of the Avesta among those which are compared with the other Arian idioms in his great work. The recovery from the cuneiform inscriptions of the language actually spoken by the Persians under the Achæmenian kings,—a good work which was begun by Grotefend and completed by Lassen and Rawlinson, — has given us a form of human speech differing from the Zend only in the conditions of its development. And we can now see that the language of the Zoroastrian books, no less than that of the rock-inscriptions of the first Darius, belongs to the same class as that of the Vêdas or sacred books of the Brahmins, and that even the names of the Vaidik deities, which appear with strangely altered applications in the Avesta†, have survived in the heroes of the *Shahnameh*, having passed “through the Zoroastrian schism, the Achæmenian reign, the Macedonian occupation, the Parthian wars, the Sassanian revival, and the Mohammedan conquest‡.” So far then is Zend from being

improbable, that the Sanscrit supplied the framework upon which the Zend has been constructed; whilst it is evident that, in the formation of Pehlvi, it is from the Arabic that assistance has been sought and applied, but following, particularly in the infinitives, the form of the Persian verb.” A. W. von Schlegel, who was more sceptical on the subject than most of his countrymen, was inclined to give the Zend an intermediate place between the language of Darius Hystaspes and the Persian of Firdousi (*Études des Langues Asiatiques*, p. 71).

* R. Rask, *über das Alter und die Echtheit der Zendsprache*, übersetzt von F. H. von der Hagen, Berlin, 1826.

† See the examples given in *Christian Orthodoxy*, Lond. 1857, p. 128. Cf. Bunsen, *Ægypten*, V, a, p. 216.

‡ Max Müller in Bunsen's *Outlines of the Philosophy of Universal History*, Lond. 1854, Vol. i. p. 123.

a corruption of the Classical Sanscrit, that it actually ranks itself with the primitive speech of the Brahmins. "The Vêda," says Roth*, "and the Zendavesta are two rivers flowing from one fountain-head: the stream of the Vêda is the fuller and purer, and has remained truer to its original character; that of the Zendavesta has been in various ways polluted, has altered its course, and cannot, with certainty, be traced back to its source." Even the name *Zend* is, with a slightly altered pronunciation†, the same as the Sanscrit word *Ch'handas* (i. e. metrical diction, cf. the Latin *scandere*) which is used by Pâninî and others to designate the language of the Vêdas‡; and it has been remarked§, that "when we read in Pâninî and others that certain forms occur in *Ch'handas* but not in the classical language, we may almost always translate the word *Ch'handas* by *Zend*, for nearly all these rules apply equally to the language of the Avesta."

87 We now come to the Latin and Greek languages, and trust to be able to show, that the former is entirely referable to the Low German class, whereas some of the most distinguishing features of the latter are High German. That the Latin is the older language of the two was recognised even by those who wished to derive Latin from Greek; for they sought a connexion between the Latin as it stood and the oldest or Æolian dialect of the Greek. The fact appears still more clearly from the structure of the language. It is the tendency of all languages built upon a system of inflexions to lose these inflexions and substitute for them a system of auxiliaries and particles. Now the Greek shows a much stronger bias to this than the Latin; indeed the mere use of the definite article and the particle *ὅτι*

* Quoted by Max Müller, l. c. p. 114.

† In Zend the letter *z* generally appears like the Greek *ζ* as the representative of the softened guttural *j*. Accordingly in the preface to the Sanscrit translation of the *Yaçna* we find *Ijisni Jandi* and *Pahalavi Janda*, signifying the "*Zend* or metrical book *Ijisni*," and "the Pehlvi book" (see Burnouf, *Yaçna*, p. xvi. note).

‡ *Amera-Côsha*, p. 359, Colebrooke.

§ Max Müller, l. c. p. 113; see also *Brit. Associut. Report* for 1847, p. 330; Hamaker, *Akad. Voorlez.* p. 219.

in Greek would be sufficient to decide the question of their relative antiquity. But this not only appears from the grammatical structure, but may be established from the words themselves, in consequence of a law which Grimm has derived from an examination of the German dialects and the old classical languages (*Deutsche Grammatik*, I. p. 584), and which has been extended to the Zend and Lithuanian by Bopp (*Vergleich. Gramm.* p. 78), and placed in a very striking light by Mr. Winning (*Manual*, p. 36). As we shall have occasion to recur to the subject in the following chapter, we shall only say here, that according to this law High German uses *tenues*, where the Gothic has *medials*, and the Sanscrit, Latin, and Zend, have *aspirates*; it has *aspirates* where the Gothic has *tenues*, and the last three languages *medials*; and *medials* where there are *aspirates* in Gothic, and *tenues* in the rest. The Zend sometimes corresponds to the Gothic; the Lithuanian agrees entirely with the Latin and Sanscrit, except that it has no aspirates. The Greek sometimes agrees with the Sanscrit, Latin, &c., at other times with the old High German (Winning, p. 40 foll.). In addition to this, the Greek and High German have prefixes where the other languages have the same word without a prefix (Winning, p. 35). Now there can be no doubt that old High German stands lower down in the scale of these languages than the Sanscrit and Lithuanian. Therefore the Greek must have at least an important element belonging to the younger or High German class of languages.

88 This is fully borne out by all that tradition has told us of the early population of Greece. It is distinctly stated that the Pelasgians, as they were called, that is, the oldest inhabitants of the country, spoke a language which was not Greek (Herod. I. 57). But we must recollect that this does not imply a radical difference of language. People, who, like the ancient Greeks, never learn any language but their own, grow wonderfully susceptible of the slightest differences of writing or pronunciation. Of this we have a striking instance in the expressions which the Greeks used in speaking of the different dialects of their own tongue. It is well known that the different petty tribes of Greece, in consequence of the numerous mountains and rivers which kept them separate, used to speak a great many

varieties of the same language even in the age of history. Now, in mentioning these provincialisms, an Athenian would not hesitate to call them all *φωναί**, and even *βάρβαροι φωναί*†; so that even the epithet *βαρβαρόφωνος* is not to be understood as implying that the difference of idiom is great or striking, but only that there is a difference. But, what is of most importance with regard to the Pelasgian languages, it appears that the old inhabitants of Italy were also Pelasgians, and there is certainly no radical difference between Latin and Greek. We are led, then, to the conclusion that these Pelasgians were simply an old or Low Iranian tribe who formed the basis of the population in Italy and Greece. If it were necessary to fix upon some particular branch of the Low Iranian, we should be inclined to select the Sclavonian. It must, however, be understood, that in calling the common element of Latin and Greek a Sclavonic language, we mean only that as the Sclavonians, the children of the Sauromatæ‡, and the most widely-extended branch of the Low Iranian family, may be traced to the immediate neighbourhood of Greece and Italy; as there are singular coincidences between Latin and the oldest Greek on the one hand, and even the modern Sclavonian languages on the other; and as the Greek traditions point to the Hyperborean regions§, we may safely call the Pelasgians by a name which, though now restricted, properly describes all those Low Iranian tribes that came into immediate contact with the people of whom we are speaking. We do not exclude the claims of the Goths (or Getæ), Scythians||, or Thracians, but we consider all these tribes as more or less affected by admixture or contact with members of the Sclavo-

* See Plato, *Phædo*, p. 62 A; *Protagor.* p. 346 D.

† *Protagor.* p. 341 c: ἔτε Λέσβιος ὦν καὶ ἐν φωνῇ βαρβάρῳ τετραμμένους. According to Pindar (*Isthm.* v. [VI.] 24), *παλίγγλωστος* is a stronger term than *βάρβαρος*.

‡ See Böckh, *Corpus Inscript.* II. p. 83: *Sauromatæ, Slavorum haud dubie parentes* (above, p. 136).

§ Diodorus Sic. (II. 47, p. 198, Dindorf): ἔχειν δὲ τοὺς Ὑπερβορέους ἰδίαν τινὰ διάλεκτον καὶ πρὸς τοὺς Ἕλληνας οἰκειότατα διακείσθαι. Clem. Alex. *Strom.* I. p. 225: εἰ δὲ τις τὴν φωνὴν διαβάλλει τῶν βαρβάρων, “ἐμοὶ δέ,” φησὶν ὁ Ἀνάχαρσις, “πάντες Ἕλληνες συνθίξουσιν.”

|| When we identify the Sclavonians with the Scythians, we are speaking only of those Scythians who were immediately known to the Greeks,

nian stock. The names of the Massa-Getæ, Mæso-Goths, and Mysians, are only various corruptions of one and the same original designation. Now it appears probable that the Slavonians inhabited Mysia from the very earliest times. We are told by Nestor, the oldest historian of Russia, that the ancient Slavonians were driven out of Mæsia and Pannonia by the Bulgarians: he is perhaps wrong in placing this event so late as the fourth or fifth century of the Christian era, but his testimony is valuable as a tradition of the fact, that the Mæsiens, and therefore of course the Asiatic Mysians, belonged to the Slavonian stock. If, however, the old Mysians and Slavonians were the same people, it is pretty clear that the Pelasgians were also of Slavonic origin, for the inhabitants of Mysia were evidently of the Pelasgian race*, and the Pelasgian traditions of Rome all point to that country. The argument from the agreement of even modern Slavonic with Latin and the oldest element of Greek, is still more conclusive. The resemblance of the Russian to the Latin is so striking that a modern traveller has not hesitated to assert, that the founders of Rome spoke the Russian language†. It is only in the most ancient monuments of the Greek language that we can find the same coincidences, and then they are sufficiently striking. Professor Dankovsky, of Posen, has shown this, in a loose and unsatisfactory way, it is true, by an interlinear approximate translation of Homer into modern Slavonic‡, and a

and were therefore Sauromatæ or Slavonians. The original Scythians, who were no doubt of the Mongolian race (Niebuhr, *Kl. Schr.* p. 361), were invaded and conquered by the Getæ and Sauromatæ, that is, by the Low Iranians, just as the old Mongolian population of India were subdued by the Hindus: and it is these Slavonians with whom the Greeks had so much intercourse; see below, § 93.

* Niebuhr, *Hist. of Rome*, i. p. 33.

† *Italy and its inhabitants: an Account of a Tour in that Country, in 1816 and 1817*, by J. A. Galiffe, of Geneva, Vol. i. p. 356 foll. The convictions of this author on the identity of Russian and Latin are valuable, not because he is, but because he is not, a philologist. Mr. Galiffe had no ethnographical theory to maintain, but, with only a superficial knowledge of the two languages, could not help recognising a strong family likeness between them.

‡ *Homerus Slavicis dialectis cognata lingua scripsit; ex ipsius Homeri Carmine ostendit Gregorius Dankovsky. Vindob. 1829.*

more extensive and formal comparison of Russian and Greek has been instituted by Constantini*. There are, indeed, some archaisms in Greek which are hardly explicable, otherwise than by a comparison with Slavonic and the oldest Low German. We allude to the arbitrary insertion of *i* in some words in Gothic, Slavonic, and the Bœotian and Thessalian varieties of the Æolian or oldest dialect of Greek.

The resemblance of Slavonian to Latin and the oldest element of Greek is not more remarkable than its dissimilarity, in certain points, to the Greek of the classical ages. For instance, there is a total absence of the article in the Latin and Russian, although this part of speech has generally become indispensable to those languages which have obtained a full literary development, and is especially prominent in the Greek. This is the more singular as the Russians have never used the Roman law or ritual, or, in fact, brought themselves into any immediate contact with the Latin language, whereas the forms of the Greek church have been long established in Russia (Winning, p.121). With regard to the breaking up of the case-endings in the Slavonic declension, in which particular this branch differs entirely from the other members of the family, we must refer the reader to some good remarks by Bopp (*Vergl. Gramm. Vorr. II. Abth. p. iv. foll.*).

89 It appears, then, that the common or Pelasgian element of Greek and Latin was allied to the Slavonian, or Low Iranian branch of the Indo-Germanic family. The additional or Hellenic element of the Greek, which afterwards pervaded the whole language, and gave a High German character to its entire structure, seems to have come from the East by Asia Minor; at any rate, we find that the Hellenes make their first appearance in the North-east of Greece. For reasons, which we have already mentioned, we believe that this new element was High Iranian or Persian. A question might be raised, whether it belonged to the High Celtic or Welsh, or to the High German, which both seem to have entered Europe from

* Δουλίμιον περί τῆς πλησιεστάτης συγγενείας τῆς Σλαβονο-Ρωσικῆς γλώσσης πρὸς τὴν Ἑλληνικὴν. ἐν Πετροπόλει. 1828.

the same quarter. Our own opinion, drawn purely from philological and geographical considerations, is, that the first population of both Italy and Greece was Erse or Low Celtic. After them came the Slavonian element in each country, and then a Lithuanian or Gothic element was superadded in Italy*, and a Persian, High German, High Celtic, or to speak generally, High Iranian, in Greece. We think the only difference between the Welsh or High Celts, and the High Germans was, that the Welsh pushed farther towards the West and lost much of the German type by mixing with the uncivilized and unadulterated Erse tribes settled in that part of Europe. It would be absurd to attempt any precise solution of all these ethnographical difficulties, but as much as we have stated seems to be sound in theory. We cannot determine, except inferentially, which of the numerous early tribes mentioned by the Greek historians was Celtic, which Slavonian, and which High German; but there is every reason to believe that the Carians were Celtic, the Pelasgians Slavonic or Sarmatian, and the Hellenes and historical Thracians of Germanic origin. To examine at length all the arguments which lead to these conclusions, would involve a discussion incompatible with our present limits. It will be sufficient to indicate the main steps of the induction. That the Carians were Celtic appears from the fact that they are said to have included the *Leleges* and the *Caucones*. To say nothing of a presumed connexion between the *Caucones* and the *Cauci*, a Celtic tribe of northern Germany, the *Leleges*, with a reduplication of the initial *l* peculiar to the Celtic language, are the same race as the *Ligydes* or *Ligurians* (see *Varron*. p. 63; *Cambridge Essays*, 1856, p. 35;

* See *Varronianus*, ed. 2, pp. 59 sqq. The theory which we have developed in this Treatise on Latin philology, and which was first stated at the meeting of the British Association in 1851, namely, that the Etruscans were a Gothic or Low German race, still seems to us to rest on the best induction that can be obtained. The great philologist, James Grimm, has been since then led to a similar view (*Gesch. d. deutschen Sprache*, p. 115, ed. 1853). And these speculations have received considerable support from the acuteness and learning of Mr. R. Ellis (*Connexion of the Rhetians and Etruscans with the Thracians*, *Journal of Philology*, No. iv. pp. 1—20; No. v. pp. 169—185: *Contributions to the Ethnology of Italy and Greece*, Lond. 1858).

below, §121), who are known to have been Celtic. The root of the name *Carian*, or *Car*, is obviously Celtic, and the same root is found in the derivative *Cretan* (*Κρής* = *Κρή-τ-ς*). In the island of Crete we find, first the *Eteo-cretans* or genuine Cretans, a Carian race also appearing in Cos, Rhodes, and other islands; secondly, a Pelasgian stock; and finally an Hellenic tribe. The Carians, therefore, were neither Pelasgian nor Hellenic. But they were not Phœnician: for David's body-guard of foreign mercenaries are distinguished as *Crethi* and *Plethi* (2 *Sam.* viii. 18), that is, as Carians from Crete, and Philistines from Cyprus; but as the Philistines were Semitic, the Cretans, as distinguished from them, must have been Indo-Germanic*. And as they were not Germanic, Hellenic, or Slavonic Pelasgians, they must have been Celts. That the Pelasgians were Sarmatian or Slavonic is shown by the obvious resemblance between the Slavonic languages and the oldest or Pelasgian element in Greek and Latin, and by the consistent traditions which place Sarmatian tribes in all the regions from which the Pelasgians appear to have been derived. That the Hellenes, and the Thracians with whom they claim immediate affinity, were of Germanic origin is proved by the identity of the two races in regard to all those national characteristics which are generally distinctive, by peculiarities of articulation and construction which are equally remarkable in High German and in the Doric or purest Greek, and by a community of name, which is observable alike in the *Thur*-ingians and *Hermun-dur-i* of High Germany, and in the *Thr*-acians and *Dor*-ians of northern Greece. Whether these considerations are or are not satisfactory as indicating the ethnographic affinities of the different tribes, we may venture to affirm the general fact, that there was first a Celtic, then a Slavonian, element: and that the original language, in which the Slavonian preponderated, was subsequently infected and pervaded by a High German dialect, to which the Greek language owes the most remarkable points in its wonderful structure.

90 The striking similarity between High German on the

* On the inferences derivable from the use of the Indo-Germanic root of *μάχαιρα*, see *Christian Orthodoxy*, pp. 251 sqq.

one hand and the ancient Greek and modern Persian on the other, was pointed out in the infancy of comparative philology*. The resemblance which Greek bore to the Persian in particular must have been much greater formerly; so much so indeed, that a Greek could learn Persian without any difficulty; Democedes makes a witty remark in Persian before he has been long at Susa†, and Themistocles, an elderly man, who had never learned a foreign tongue in his life, made himself a proficient in the language within a year‡.

91 With the Teutonic race the ancient Greeks had many points in common. The same love of freedom, the same martial qualities, the same tendency to the formation of a considerable number of small independent states, and the same prevalence of federalism, characterizes both of these races. The Germans and the Greeks alone have been distinguished among Europeans by a fearlessness and subtlety of metaphysical speculation. Colonial enterprise is a feature which marked the ancient Greeks, and it is so conspicuous in the modern Germans that the whole world is filled with scattered members of one family. Even in their literary tendencies we observe the same agreement. It has been well said by an eminent philologer§, that “the drama, or the combination of the lyric and epic elements, and the complete representation of the eternal laws of human destiny in political society, is entirely unknown to the Semite. It is exclusively the creation of the Hellenic mind, feebly imitated by the Roman, reproduced with originality by the Germanic race. Nor is Iranian India entirely wanting in this last of the three species of poetical composition.” If we turn to the languages themselves, we shall see that it is only the Greek and the German which have combined a perfectly refined syntax with an etymo-

* See above, § 33.

† Herod. III. 130.

‡ Plutarch, *Themistocl.* XXIX.: ἐνίαντρον αἰτησάμενος καὶ τὴν Περσίδα γλώτταν ἀποχρώντως ἐκμαθίων. Cornel. Nepos surely exaggerates when he says: *ille omne illud tempus (annum) litteris sermonique Persarum dedit, quibus adeo eruditus est, ut multo commodius dicatur apud regem verba fecisse, quam hi poterant, qui in Perside erant nati.* Thucydides says merely: τῆς Περσίδος γλώσσης ὅσα ἡδύνετο κατενόησε (I. 138).

§ Bunsén, *Report to the Brit. Assoc.* for 1847, p. 270.

logical structure more or less complete, and a living power of derivation and composition. And even in the details of articulation we observe striking coincidences. The evanescence of *n* and *s* is particularly observable in German and Greek; and the Dorian or peculiarly Hellenic Greek especially affects the final *n*, which is so marked a characteristic of new High German*. But perhaps the most decisive correspondence of articulation is found in the consistent repudiation by both languages of all the soft palatal sounds suggested by the Slavonic and Pelasgian idioms, with which the Greek and German languages were thrown into contact at a very early period.

92 These resemblances are still farther confirmed by the appellations in which the Greeks and Germans equally delighted. We have seen above that the titles *Mann*, *Herr-mann*, *Ger-mann*, adopted by the eastern Teutons, indicated a predominance of the manly character, or that this race adopted a name particularly significant of their warlike temper. The same is the meaning of the word *Ἑλλην*†. Another special designation of the Eastern or High Germans is *Thur-ing*, which signifies "highlander" or "mountaineer." We have found it combined with the former appellation in the name of the *Her-mun-duri*: and it appears by itself in the words *Tyr-ol*, *Taur-us*, *Duro-triges*, *Dorset*, and *Taur-ini*. Now this name again is a distinctive title of the genuine northern Greeks, as opposed to the Pelasgians: for the *Ἀωρ-αῖς*, or "highlanders," are represented as descended from *Ἀῶρος* the son of *Ἑλλην*, as well as their brethren the *Αἰολαῖς*, or "mixed men," and the *Ἰωνες*, or "coast-men." We can trace back this correspondence of ethnical nomenclature to the original seats of the Greek and German race in Asia. Immediately to the north of Greece, in the highest mountain-land of Epirus, we recognise in the *Γραι-οι* or *Γραι-κοί*‡ about Dodona the element *ger-* of the word *German*; and in the *Θρᾷ-κες* to the west we have again the

* See the Instances in Matthiæ's *Gr. Gr.* p. 46; Ahrens, *de dialecto Dorica*, p. 71 sqq.

† *Ἑλληνες*, "the warriors;" comp. the name of their god *Ἀπὲλλων*; Müller, *Dor.* II. 6, § 6.

‡ See Niebuhr, *H. R.* I. note 162, p. 55, Tr.

element *Tor* or *Dor**. It has been already mentioned that the *Γεο-μάνιοι* were a tribe of the ancient Persians. We find the other element in the proper name *Darius* or *Darayawush*. And we may, with a fair amount of probability, maintain that the stream of High German or Greek emigration entered Europe by way of Asia Minor, and that its course may still be traced through the dry bed of obsolete proper names and shadowy tradition†. Thus, to begin with the Hellespont, where Asia

* That, on the other hand, the original inhabitants of Thrace were Slavonians (above, pp. 129, 148), *i. e.* the same as the Pelasgians, is similarly shown by the occurrence in Thrace of names pointing to Media and northern India. For it cannot be merely an accident that the Thracians, whose range of snowy mountains was called *Hæmus* (*Αἴμος*), a name recalling that of the great chain in northern India, reckoned among their tribes the "Indians" (*Σιντοί*) and the "Medes" (*Μαῖδοι*). Thucyd. II. 98, § 2. That the original form of the word *Ἰνδος*, which designates the great western river of India, and the whole people, in the language of the ancient Persians, was *Sindhus*, *Σίνδος*, or *Σιντός* is a well-known fact. See Schlegel, *de l'Origine des Hindous*, pp. 441, 2 (*Essais Lit. et Hist.* Bonn, 1842).

† The few inscriptions, which preserve fragments of the languages of Asia Minor, exhibit unmistakable traces of Indo-Germanic affinities, and occasionally approximate to the Greek language in its vocabulary and grammatical forms. The tomb of king Midas, the son of Gordias, (Herod. I. 14) has the following inscriptions:

1 *Ates Arkiaefas akenanogafos Midai gafantaei fanactei edaes.*

2 *Baba Memefais Proitafos kfi ganafegos sikeman edaes.*

(See Müller, *Dor.* I. 9, note *l*; Texier, *Asie Mineure*, I. p. 155), where we have the gen. in *-fo-ς* and the 3 pers. sing. in *ς*, as in the Corecraean inscription, and may recognise the actual Greek word *φάναντι*, and the augmented verb *e-daes*. And the bilingual Lycian inscriptions have decidedly an archaic Greek character. For example, we have the following renderings of the otherwise unknown words in the Levis inscription (*Trans. Phil. Soc.* Vol. I. n. 18, p. 197): *ewuinu itatu mene prina-*

τοῦτο-τὸ μνήμα [δ] εἰργά-

futu Polenida Molleueseu se Lapara Polenidau Poreuemeteu prineze-
σαντο Ἀπολλωνίδης Μολλίσσιος καὶ Λαπάρας Ἀπολλωνίδου Πυριμάτιος οἰκείου
yeue urppe lada eptheue se tedeeme se ey e tese reti detee
ἐπὶ ταῖς γυναιξὶ ταῖς ἑαντῶν καὶ τοῖς ἐγγόνους καὶ ἔν τις ἐδικήσῃ
itatu eweue me ey e oete ponamakke adadauade ada.

τὸ μνήμα τοῦτο ἐξώλεα καὶ πανώλεα εἴη αὐτῷ πάντων.

The words beginning with *me ey e* and *ἐξώλεα*, to the end of the inscription and its version, do not correspond. Mr. Daniel Sharpe says (*Trans. Phil. Soc.* p. 200) "in place of the curses denounced in the

Minor and Europe are divided by a narrow strait, we find the well-known name of *Tqola*, in which the element *Tor* is still conspicuous, and in connexion with the same region we have the hero *Dar-danus*. Then again the Teutonic name appears in *Teuta-mus*, *Teuthras*, and the like. And *Priamus* and *Paris*, whose common name is best explained from the Persian, appear as the leaders of a confederacy which extended throughout the whole of Asia Minor, and gave a hand to the western borderers of Irân. "*Priamus*," says a modern philologist*, "is simply a vassal of the Assyrian King Teutamus, who sends him a body of auxiliary troops out of the heart of Persia." The evidence for this chain of ethnographic connexions is necessarily of a cumulative nature. Language, tradition, history, mythology, and as far as this is applicable, those features in descriptive geography which influence the spread of population, enable us to trace the Græco-German race from the mountains of Karmania and Kurdistan through the north of Asia Minor and across the Hellespont into Thrace and Illyria. Nor do we stop here: for we may see how, in a strong but narrow stream†, this warrior-band forced its way through the Slavonian and Low German tribes into the march-land of Vienna, and from thence gradually expanded itself along the Danube until it had peopled or conquered the whole of the central plateau.

93 There are two ancient names of constant occurrence, which seem to mix themselves up with the traditions from which we derive the theory respecting the origin and progress of the Helleno-Teutones. We refer to the Scythians and Pelasgi. It appears to us certain that the Pelasgians were the great southern branch of the Slavonian stock, which, starting from Khorassan in an age long anterior to chronology, spread itself over the whole of Sarmatia, and eventually furnished a

Greek against the violator of the tomb, the Lycian threatens him with a fine."

* Hamaker, *Akademische Voorlezingen*, p. 14.

† The systematic and military form which characterized the emigrations of the High German and High Celtic tribes, may be seen in the accounts given of the movements of the Teutonic and Cimbrian tribes conquered by Marius little more than 100 years B. c.

large substratum of population to Thrace, Illyria, Greece, and Italy. It is also pretty clear that these Pelasgi recrossed into Asia by the Hellespont, and colonized the Western coasts of Asia Minor and the islands of the Archipelago long before the Helleno-Teutones appeared on the stage. We conceive that the Scythians, properly known under this name, were the great Low German tribe of *Getæ*, *Guths*, or *Goths*. The prefix denotes that they were *Asa-Goths*, or points to their Asiatic origin; and we conclude that they were identical with the *Sacæ**, who gave their name to the other great subdivision of the low German family — the *Saxons*. We trace them to an original settlement a little to the East of the Slavonian or Sarmatian Pelasgi, namely, to Bokhara, or Hindu-kuh; and we entertain no doubt that it was the same branch of the Iranian race which invaded the Panjab and Hindostan, and established there the Sanscrit language and the Brahminical religion. In Europe we find the *Getæ* or *Scythæ* occupying the lower Danube, and stretching in a North-westerly direction to the Baltic and German ocean. It is easy, therefore, to distinguish between the *Getæ* and the Helleno-Teutones. But we have to guard ourselves against the risk of vagueness in regard to other tribes, which is likely to be produced by the very lax and general manner in which the ancients employed the name *Scythian*. It is made to include all the tribes to the North of the Euxine and Caspian, and may therefore point to branches of the Turanian, Celtic, and Slavonian stocks, as well as to the Low Germans, whom it strictly and appropriately indicates. We ought therefore to adopt a classification which would distinguish between the Scythians properly so called, namely, the *Getæ* and *Sacæ*, whom we may term the Teutono-Scythians; and the pseudo-Scythians, i. e. (1) the *Mongols* or *Turano-Scythians*; (2) the

* The term *Sacæ* was used by the Persians to include all the Scythians: οἱ γὰρ Πέρσαι πάντας τοὺς Σκύθας καλέονσι Σάκας (Herod. vii. 64), and similarly Greece in general was the land of the *Ionians* (Ἰαόνων γῆ, Æsch. *Pers.* 182). It is remarkable that the Indians also included under the same names of *Sacæ* and *Iavani* all the nations living to the north and west of their neighbours the *Pahlavi* or *Persians*. See *Râmâyana*, Lib. i. c. 54, cl. 20, and Schlegel's note on his Latin version, p. 168. Gorresio says (*Râmâyana*, vi. p. 443): "il nome di *Yavani* venno dopo l'età d'Alessandro il grande applicato ai Greci."

Cimmerii or *Celto-Scythians*; and (3) the *Sauromatæ* or *Slavo-Scythians**. In the great country of Thrace we must admit the presence of both *Getæ* and *Sarmatæ*; and as the name *Θοῤῥξ* involves the root *Tor* or *Dor*, we must also recognise an admixture of the Helleno-Teutones. In fact, in all countries which have been the highway of migration, we must expect that ethnical elements will be fused together in an entanglement which no modern knowledge can be expected to unravel.

94 Although we entertain no doubt whatever as to the ethnical affinities of the ancient Greeks and old High Germans, we do not overlook the fact that the inhabitants of Hellas owed their early civilization and some very peculiar features of their literary culture to a source with which the Teutonic races had no connexion except through a Greek medium. While the Indo-Germanic tribes were spreading to the Ganges on the one side, and to the Atlantic and North Sea on the other, the Syro-Arabian or Semitic family was gradually diffusing the primitive civilization of our race from the river-lands of Mesopotamia and Egypt along the whole of the south coast of the Mediterranean. Under the name of Phœnicians they were the earliest navigators and colonists of that great island sea†. In some of the islands they constituted the largest part of the population. But every

* That the Scythians were at least in part Slavonians is proved by the fact mentioned by Linde (*Slownik Polski*, II. p. 1042), and Garnett (*Essays*, p. 248), that the Slavonic *kolo*, "a wheel," and its Polish derivative *kolasa*, "a wheel-carriage," French *calèche*, existed in Scythia in the days of Ovid, who says:

Gens inculta nimis vehitur crepitante *colossa*;

Hoc verbo currum, Scythia, vocare soles.

That by "Scythian" he means "Sarmatian" is clear from *Trist.* III. 12, 30.

Stridula Sauromatæ plaustra bubulcus agit.

† Appian says (*Hist. Rom.* VIII. 1): *Καρχηδόνα τὴν ἐν Αἰβύῃ Φοίνικες ᾤκισαν, ἔτεσι πεντήκοντα πρὸ ἀλώσεως Ἰλίου*, i. e. in B. C. 1234. It is probable, therefore, that they had navigated the Mediterranean for a long time before they undertook this colonization on a large scale. And the extreme antiquity of the name of Mount Atlas, which is clearly of Semitic origin (Wetter, *der Mythos von Atlas*, Mainz, 1858, pp. 30 sqq.), shows that the Phœnicians must have established themselves on the north-western coast of Africa from the very earliest period.

where they communicated the cognate arts of architecture and writing, and imparted not a few of the religious and philosophical dogmas which form the basis of European mythology. Indeed, when, at a later period, Pythagoras and Plato sought instruction from the fountain-head of Asiatic wisdom, they did but confirm the belief which was floating vaguely on the surface of Hellenic tradition. The influences of Phœnician culture must, however, be traced back to a time when the Thuringian Greeks had not begun to descend upon Thessaly and the rest of the peninsula, and when the Sclavonian Pelasgians were still the ruling caste. In fact, it was in the islands of Crete, Rhodes, and Cyprus, and on the West coast of Asia Minor, that the Phœnicians first taught the Thraco-Pelasgians those arts which made the tower-builders of Argos and Italy look back to Lydia with mysterious reverence, or which the Greeks themselves subsequently derived from the Southern Islands of their narrow sea.

95 We are not however to suppose with Dr. Rôth*, who has ably advocated the claims of the Phœnicians to a large share in the early cultivation of Greece, that the name *Πελασγός* is therefore of Phœnician origin. He maintains that this word is merely another form of the designation of the *Philistines*, namely, פִּלִּשְׁתִּי *Plishthi*; and that, as this is a derivation from פִּלִּשְׁתִּי *Plesheth*, the last letter of which is a servile, the original form of the ethnical name must have been פִּלְשְׁתִּי *Pláshî*, “the wanderer,” which is analogous to the Æthiopic *falasi*, “peregrinator.” Consequently, the *Kari*, *Krethi*, *Plethi*, and *Pláshî*, were synonymous names for the Phœnician rovers who colonized the islands of the Mediterranean. Now to omit all strictures on the details of this etymology, which is faulty in itself, we remark that, with the fullest admission of the many contacts between the Phœnicians and Pelasgians, we are bound to conclude that the name given to the foreigners by the Greeks, who spoke about them, would more probably be a term significant in their own language, than a foreign word which conveyed no meaning to those who used it. Besides, this

* *Geschichte unserer abendländischen Philosophie* (Mannheim, 1846), Vol. I. notes 25, 28.

etymology does not explain the cognate term *Πέλοψ*, which is synonymous with *Πελασγός*, and points to an emigration from Asia Minor to Argolis, indisputably connected with the progress of Phœnician civilization. All nouns ending in *-οψ* refer to the colour or shape of a substance, in fact, to that which most strikes the eye in its outward appearance. *Πέλοψ* is therefore, like *Αἰθίοψ*, an epithet descriptive [of the complexion*. We have shown elsewhere that it signifies "swarthy of face," and that *Πελασγός* means "the swarthy Asgian," or "Asiatic†."

* Although no one will deny this position in the case of *Αἰθι-οψ*, *αἰθ-οψ* and *οἶν-οψ*, it is not thought so obvious that the same mode of interpretation applies to *ἥν-οψ*, *μέρ-οψ*, *ῥᾶρ-οψ* and *στέρ-οψ*. Hesychius renders *ἥνοψ*, *πάνν εὐηχος*, *λαμπρός*, *διαφανής*. As the word is an epithet of *χαλκός*, *οὐρανός* and *πυρός*, it can only imply a bright, yellow, golden colour, and the word must be the Hellenized form of the original *jan-ops* or *διαν-οψ*, referring to the light of day. *Νῶρ-οψ* is also an epithet of *χαλκός*, and is considered by Plutarch, who makes some bad jokes on the subject, as equivalent to *λαμπρός* and *διανγής* (*Conviv. Disput.* 659D, 692F = III. 689, 847, Wyttenb.) We believe that the root *νωρ-* is simply *νηρ-* with the usual change of weight (*Gr. Gr.* 22), and that the latter, found in *Νηρεύς*, *νήρι-τος*, implies a perpetually floating motion, as of waves or leaves, and is therefore applicable to the flashing and flickering *ἀστραπή* of polished metal. We have the same combination of meanings in the Latin *micare* and *coruscare*: see Döderlein, *Etym. u. Syn.* II. 79 sqq. It has generally been thought that *μέρ-οψ* refers to speech, and means "having an articulate utterance." We have no hesitation in recognising in this compound the root *μαρ-* of *μαρ-μαίρω*, *μάρ-μαρος*, *μορόεις*, "bright," "shining;" and we think, that, as an epithet of men, it implies a *fair* as opposed to a *dark* complexion: so that the *Μέροπες* (of Cos and elsewhere) were opposed to the *Πέλοπες*. According to the usual interpretation of *στέρ-οψ* it is synonymous with *ἥνοψ* and *νῶροψ* (cf. *Soph. Antig.* 1114; *Eurip. Phœniss.* 235 c, schol.): so that it will be connected with *στεροπή*, *ἀστραπή*, and ultimately with *ἀστήρ*, *ἀ-στέρ-ος*. Lobeck, *ῥηματικόν*, p. 41, says: "*στέροψ* arbitror a *στέρω* sive *στρέω* ductum cum significatione torti et volubilis; certe *στέροψ* *λιγνός* apud Sophoclem nihil differt a *λιγνός* *στροβίλος* in *Dosiadæ Ara* I. v. 5, quod epitheton pluribus verbis explanat Apollonius I. 438: *λιγνός* *πορφυρέαις ἑλικέσσιν ἄτσουνσα* id est *gyros agens, wirbelnder Rauch* (curling smoke)." If so, *στέροψ* is a synonym of *καλαῦροψ* = *κραῖροψ*. Döderlein, *Etym. u. Syn.* I. p. 21.

† *Varronianus*, p. 29; Kenrick, *Phil. Mus.* II. 353. We may add that *πέλος* is translated *ὑπόφαιος* in a gloss on a Fragment of Sophocles, 122 Dind.: *κυνὸς πέλες τε μηλιάδος βοδὸς ῥινόν*. It is somewhat comical that with these evidences in favour of an appellation significant of a dark and

The last part of this name is clearly connected with the ethnical designation ἡσκάνας, *hashk,naz*, "Ascanius," which the book of Genesis assigns to one of the sons of Gomer; we have Ἀβασγοί and Ἀβασγία in Asiatic Sarmatia, on the eastern shore of the Euxine; and as we find the *Anglians* by the side of the *English*, (pronounced *Ing-lish*) and *Ing-avones*, so we may recognise this name in the Frankish *Isc-avones* (above, p. 127, note, and p. 130, note). But there is not the same objection to a Semitic etymology for the name of the *Telchines*, who introduced the useful

swarthy hue, Dr. Hitzing should have been led to suppose that the Pelasgi owed these names to their fair and white complexion. He says (*Urgeschichte u. Mythologie der Philistæer*, p. 44): "I consider *πelasγός* identical with the Sanscrit word *valaksha*, or *balaksha* 'white.'" This etymology does not seem to us to need refutation. Its intrinsic improbability is a sufficient obstacle to its reception. Dr. Karl Meyer proposes a Celtic etymology. He says (*Gel. Anzeig. d. bayer. Akad. d. Wiss.* 1843, p. 709): "I refer this name *Πελασγός*, with perfect certainty, to the Celto-Sanscrit (also Hebrew) root *beh*, 'high,' 'proud,' S. *balh*, *valh* ('eximium esse, excellere') Cymbr. *balch*, *gwalch*, Irish *baluch*, *bale*, a derivation which, besides its obvious propriety as expressing the race of Niobe, is rendered more probable because by its double reference in Celtic to bodily and mental elevation, especially the flight of birds—Cymric *gwalch*, 'soaring,' *uar*, 'Falke'—it gives a natural explanation of the assumed connexion between *Πελασγός* and *πελαργοί*." Another Celtic explanation has been lately given in the *North British Review*, No. LIX. p. 101, namely that *Pelasgia* is *Beil-as-ce*, "the land of permanent habitation," an excellent name doubtless for a tribe specially distinguished as wanderers! The same writer has conclusively proved his philological incompetency by maintaining confidently that the nomen *Cincinnatus*, which is a common Latin epithet, is the original name for *dictator*, i. e. in Erse *Cean-cean-eat-eis*, "the head over the head of the country people!" (*Ib.* p. 98). Craine (*Philologus* for 1855, p. 576—590) connects *Πελασγός* with *πέλαγος* in the sense of *wald*. We not only adhere to the derivation which connects the *Πελασγοί* with the *Πέλοπες*, but also recognise a confirmation of this view respecting the first syllable in the word *πελαργός*. Dr. Hitzig's objection (p. 46) that *πελ-αργός* could not signify a juxtaposition of two distinct colours in the plumage, but must signify a blackish white, i. e. "grey," does not appear to us at all valid. The main colour of the bird is white, which seems to be superinduced upon a lower coat of black, so that *πελαργός*, "the black but whitened bird," is quite analogous to *πύγαργος*, "the white-backed eagle," which Æschylus, *Ag.* 114, describes thus in opposition to an eagle entirely black: οἰωνῶν βασιλεύς, ὁ κελαινός ὃ τ' ἔξοπιν ἀργός.

arts among the Cretans, Cyprians, and Rhodians, and who gave to the city of Sicyon one of its most ancient names; and we feel disposed to accept Dr. Röth's suggestion that *Tel-chin*, the son of *Europs*, was another form of *Tubal-qain*, and that the same word appears in the name of the *Tibareni* or *Chalybes**. Consequently, the *Tel-chines* were merely the "copper-smelters;" and though the name of the *Dak-tyli* is formally grecized, we can with him recognise in this a Semitic compound containing the same root כָּלֵךְ or כָּלֵךְ, and signifying the "copper-miners." So that the two names occur in a very natural juxtaposition. We think there are also good grounds for a belief in the Phœnician origin of the names of the Plethi and Idæi, names more or less connected with the Phœnician traffic with the islands of the Mediterranean. It may be remarked that Cretan and Phœnician legends are usually commutable.

96 The difference, therefore, between the old or Pelasgian and the classic or Hellenic language, must have been the same in kind with that which constitutes the distinction of the whole Indo-Germanic family into two great branches; and in investigating the origin of the Hellenic forms our problem is, from the given Greek, to reproduce the Pelasgian, word,—to pass from a language, which in its known state gravitates towards the High German or Persian, to one which was entirely Low Iranian in its structure. Although we shall be careful to point out in the following pages the peculiarities which distinguish the Greek words, as we have them, from their original type, as it may be restored from a comparison of the oldest languages of the family, it may be convenient to state here, briefly and generally, what are the laws regulating the use of the consonants in the Hellenic idiom, as contrasted with what we can infer with respect to the Pelasgian or older state of this language. The Hellenic or classical Greek tolerates only four consonants at the end of words,—*κ*, *ν*, *ρ*, *ς*. The first of these forms the termination of two words only—*οὐκ* and *ἐκ*; in the former it is a mutilation of

* It is right to mention that a very different view is maintained by Kuhn, *Zeitschr. f. vergl. Sprachf.* i. pp. 193 sqq.

$\kappa\epsilon$, in the latter of $\mu\varsigma$. It will be observed, too, that $\omicron\upsilon\kappa$ never occurs before a consonant, and $\epsilon\kappa$ never before a vowel. Of the other three consonants which may be finals, ν is often a representative of ς , as in $\tau\acute{\upsilon}\pi\tau\omicron\mu\epsilon\nu$. Moreover, when ς is the final letter it must not be preceded by a dental or a liquid. An analysis of the Greek language, and a comparison with other members of the Indo-Germanic family, assure us that in the more perfect form of the inflexions these rules could not come into application: for in the old language no consonant would ever be required to stand at the end of a word, or before another consonant, because no consonant is ever articulated in the primitive state of a language without a vowel following it. With a liquid, as we shall see, the case is somewhat different: the articulating vowel may be placed either before or after it; and this is the reason why the only three consonants in common use as finals are liquids. The Greek language first cast away its final vowels, and then the consonant of the suffix yielded to the laws of euphony. Besides these rules touching the final consonants, there are also others respecting initial consonants, and those in the middle of a word, which are just as distinctive of Hellenism as the others. One of the most remarkable of these appearances is the tendency to reject the digamma or aspirated labial, whether at the beginning or in the middle of a word. This sound has completely vanished from the Greek with which we are most conversant, though traces of it still remain in the poems attributed to Homer. The w -sound seems frequently to have appeared in the ante-Hellenic language preceded by δ , κ , σ , τ . In these cases either the first letter has been dropped, and the w somewhat modified, as in $\phi\acute{\iota}\nu$ from $\sigma\phi\acute{\iota}\nu$; or, what is more common, the w has been omitted, as in $\delta\acute{\epsilon}$ for $\delta\upsilon\acute{\epsilon}$. In Hellenic the initial σ is almost always changed into h , a principle also observed in Zend as compared with Sanscrit, and in Welsh as compared with Erse: similarly j is either changed into ξ or h , vocalized into ι , or assimilated, and this also takes place in Zend as compared with Sanscrit: in Slavonic the j appears under the form sh , which, we shall see, is a step towards z , though still a step from it. Finally, the following combinations of consonants cannot take place in the Hellenic language— $\mu\omicron$, $\mu\lambda$, $\beta\nu$, $\delta\lambda$, $\nu\omicron$; but wherever they appeared in the older

language we have $\mu\beta\varrho$ or $\beta\varrho$, $\mu\beta\lambda$ or $\beta\lambda$, $\mu\nu$, $\lambda\lambda$ and $\nu\delta\varrho$. It is unnecessary to add, that these prohibitions against the use of certain consonants and combinations of consonants interfered materially with the discrimination of the root and termination, and, by ruining the inflexions, gave occasion to some of the most remarkable peculiarities of Greek syntax, such as the use of the article and of the prepositions.

97 After what has been said, it is scarcely necessary to mention that the different degrees in which the old Pelasgian or Slavo-Phœnician language of the South was affected by the Hellenic or Teutono-Persic language of the North, constitute the differences of dialect about which Grammarians have written so voluminously. Consequently, all dialectical distinctions in the Greek language must resolve themselves into one or other of two great classes; and the ancient Greeks were well aware of this when they regularly opposed the Dorians to the Ionians*. The former, as we have seen, were the representatives of the High German warriors, who gradually forced their way, in an united and distinct body, from the North of Thessaly to the promontory of Tænærum. In Greece, as in Germany, these Thuringians were remarkable for the military concentration which kept them from being absorbed by the populations of the invaded countries. They formed everywhere a distinct caste, an aristocracy of conquest. But as every army, however well organized, has its train of undisciplined followers, and leaves crowds of stragglers on its line of march, so we find the Dorians, in their progress through Thessaly, leaving behind them similar detachments of their forces; and these stragglers, having combined themselves with the Pelasgians of that district, were called *Αἰολεῖς*, or “mixed men†,” a name which was re-

* This opposition was not neglected by the author of *Gen. x. 4*, who makes *Helishâh* or *Hellas* the eldest son of *Javan* or *Ἰάων*.

† Grimm supposes that the name *Αἰολεῖς* refers to their *parti-coloured clothing* (*Gesch. d. deutsch. Spr.* p. 296): “*Ἰαιολεῖς* d. h. *die bunten*; gleich Britten und Picten führten Æolier den Namen der buntgekleideten.” But if the name had referred to the clothing of the tribe, it would surely have been in a compound form like *αἰολομίτρης*, *αἰολοθώραξ*, *κορυνθαιολος*. As an epithet of a tribe, *αἰολεύς* must be compared with its other form

tained by the Thessalians and Bœotians long after the opposition of *Dorian* and *Ionian* had established itself in other parts of Greece. The ethnographical fact is preserved in the legend* that "Hellen left his kingdom to Æolus, his eldest son, while he sent forth Dorus, and Xuthus the father of Ion, to make conquests in distant lands." This mythical genealogy makes Ion not the son, but the grandson of Hellen; and it has been shown by Mr. Kenrick†, that the name of Xuthus, which is interposed, is simply an epithet of the Dorian God Apollo, who was the θεὸς πατρώος of the Ionians. From all the circumstances known to us, we are entitled to infer, that the Ionians, wherever they retained their independence, were only partially influenced by the Dorians: the Pelasgian element in their composition remained for a long while in full force, though they adopted the religious tenet of the Dorians, and paid homage to the conquering God under whose auspices the invaders marched and fought. We have shown above that the Dorians, according to the primitive meaning of their name, were called "Highlanders or mountaineers," and Mr. Kenrick, who has derived the same result from a Greek etymology of the name, has shown that the *Ionians* were emphatically the "Men of the coast" (*Ἰωνία*), and that they were also called the "Beach-men" (*Αἰγιαλεῖς*), or "Sea-men" (*Ἀχαιοί*): and he remarks also that "the distinction between Doric and Ionic in later times answered very well to that which has been observed to prevail between the speech of mountaineers and of littoral nations,—one being harsh and broad, the other smooth and liquid‡."

ἀόλλης, i. e. "pressed together, standing side by side," just as *Αἰόλος*, the god of the different winds, expresses the meaning of his name in *ἄελλα*, a *turbo*, or whirling together of objects from all quarters. From the idea of juxtaposition without fusion, we get the signification of *αἰόλος* with reference to stripes or bands of alternate colours, as distinguished from *ποικίλος*, which denotes variation of colour by way of spots or circles (below, § 266). The meaning of *αἰόλος*, as indicated by the epithet *νογυθαῖος* is well illustrated by the alternate black and white in the crest of an armed figure represented on an ancient vase in the British Museum (see Gerhard, *Athenens Geburt*. Berlin, 1838. Taf. II. 2).

* Apollodor. i. 7, 3, 1; Thirlwall, i. p. 101.

† *The Egypt of Herodotus*, p. lix, note 2.

‡ *Ibid.* p. lxi.

We must not forget, however, that there were other differences of a more important and extensive nature; and that the Doric, or purely Hellenic element, at length so completely asserted itself, that we can only by a laborious process succeed in partially reproducing the articulation and structure of the old Pelasgian speech. The broad distinctions therefore are not to be expected in the four dialects, which, at a later period, were rather names of different branches of literature, than four varieties of spoken language. The Æolic dialect (ἡ Αἰολίς), in this sense, referred to the lyric poetry cultivated at an early period by the Æolians of Lesbos; the Doric (ἡ Δωρίς), to the choral poetry of the Dorians; the Ionic (ἡ Ἰός), to the epic poetry of the Ionians; and the Attic (ἡ Ἀτθίς), to the universal literature of that branch of the Ionian race which had settled in the "Promontory-land" (ἡ Ἀττική, or Ἀκτική). The conquests of Alexander carried this last, in a less pure and vigorous form, into Asia and Egypt, where it incurred various corruptions, and became Hellenistic rather than Hellenic. An investigation of this κοινὴ διάλεκτος, as it has been called, does not belong to our present purpose, which is rather to reproduce the more perfect and complete state of the Greek language than to scrutinize its decayed and feeble condition.

CHAPTER V.

THE THEORY OF THE GREEK ALPHABET.

98 Difficulty of the subject. 99 Every alphabet originally a syllabarium; so that the distinction between vowels and consonants is quite arbitrary. 100 (1) *Semitic origin of the Greek Alphabet*. Semitic alphabet consisted originally of 16 letters organically arranged. 101 These 16 letters formed the original Greek alphabet. 102 Subsequent additions to the Greek alphabet. 103 Poverty of the Egyptian hieroglyphic alphabet. 104 Artificial arrangement of the Arabic characters. 105 (2) *Analysis of the Greek Alphabet*. Preliminary examination of the *Déva-Nāgarī*. 106 Inferences deducible from the shape of the Sanscrit characters. 107 Formation of the vowel-signs and origin of the liquids. 108 Theory of the aspirates, sibilants, and secondary vowels. 109 Main difficulties in regard to the Greek alphabet. 110 The Greek digamma. 111 The Latin F. 112 The dental sibilant ζ. 113 The Greek aspirate. 114 Evanescence of ν and σ. 115 Double value of ξ. 116 Etymological analysis of η and ω. 117 General review of the Greek alphabet. 118 (3) *Interchange of mutes in the Greek and cognate languages*. Grimm's law. 119 Exemplifications. 120 Exceptions in the case of the Greek language. 121 Law of divergent articulations. 122 Corresponding consonants in Sanscrit, Greek, and Latin. Appendix to § 110. (a) The digamma as it appears in inscriptions. (b) Extracts from Bentley's MS. on the digamma.

98 **T**HE necessary prelude to an attempt to increase our knowledge of a dead language is, an inquiry into the value of the symbols or letters which have preserved and transmitted to us its written remains. All languages are made up of sounds, and of these sounds the letters are the only representatives in the case of a language no longer spoken; unless, therefore, we can to a certain extent ascertain to what sounds these symbols corresponded, we shall hardly be able to draw a profitable comparison between the language in question and the others to which it is related; nor will it be possible to explain and justify those regular permutations of letters, which time and use have occasioned in languages of the same family, if we do not discover what was the value of this notation in the first instance. To obtain this knowledge, the great philologists of the present day have laboured diligently; but though they have collected an immense mass of facts, and have heaped up materials for the future labourer to work upon, they have left so much room for arrangement and construction, that this subject is the most difficult part of our task. The Greek alphabet presents

peculiarities of a most embarrassing nature. It derives its characters and their arrangement from a family of languages with which it has no immediate connexion, and the whole development of its system of writing is at variance with the notation on which it is based. We must, therefore, consider as independent questions (1) the Semitic origin of the Greek alphabet, (2) the actual value of the different letters as used by the Greeks, and (3) the changes which take place in consonants of words as represented in the different idioms of the Indo-Germanic family. It will, however, be as well to begin with a few remarks on alphabetical writing in general.

99 According to the grammatical system which has descended to us from the Greeks, we are taught from our earliest years to distinguish between vowels and consonants, and to regard them as necessarily having a separate existence. This is a notion which must be at once discarded by every one who would make any progress in philology. Language is a transfer of the thoughts to the outward world of sense: when this is effected by sounds, it is speech; when by symbols, it is writing; but as men speak before they write, every symbol is a representative of some sound: it is in itself an element of language. There are some languages in which each symbol represents a whole word; such is the case in the Chinese. But in all languages every symbol must have been significant in the first instance. Consequently, there could not be any distinction into vowels and consonants, but the alphabet must have been a syllabarium, the elements of which might or might not be independent words. "By words," says W. von Humboldt (*über d. Versch. d. menschl. Sprachb.* p. 74), "we understand the signs of individual conceptions. A syllable forms a unity of sound, and becomes a word when it obtains an independent signification; but for this a combination of several syllables is sometimes necessary. A doubled unity—of sound and conception—meets in a word." The distinction of these syllables into consonants and vowels is perfectly arbitrary. Neither a vowel nor a consonant can have any separate existence in spoken language: the consonant always requires a vowel-appendage in order to be pronounced; the vowel cannot be pronounced without an initial

breathing, which is sometimes so strong as to become a definite consonant. In either case the vowel can be regarded only as a modification of its fulcrum. Hence, in all ancient alphabets, we find that the vowels are not in the first instance expressed by separate symbols, but, as the indistinct *ă* or *ě*, which originally accompanied every consonant, was in process of time developed into distinct vowel-sounds, these were denoted by various hooks or points attached to or written under the consonants to which they referred, or, at the beginning of the word, to the mark denoting the breathing with which they were pronounced. At first, then, there were only two sorts of letters,—breathings and consonants,—both of them accompanied by short vowels which were not expressed, or by modifications of these vowels expressed by certain marks pertaining to the original symbol. The first deviation from this original state would take place in those languages, which, like the Indo-Germanic, did not use many or very various breathings, and in which the vowels assumed to themselves at an early period important functions in the grammatical organization. But even then no new symbols were invented for the vowels. It was thought sufficient to adopt for their expression more or less mutilated forms of those breathings or consonants with which they were found most constantly combined. We shall presently show, from a palæographical examination of the Greek and Sanscrit alphabets, in what manner this was effected.

100 (1) *Semitic origin of the Greek Alphabet.*

The traditional history of the Greek alphabet is well known. It is said to have originally consisted of only 16 letters, which were brought from Tyre by Cadmus, and to which 4 were added by Palamedes at the time of the Trojan war, and subsequently 4 others by Simonides of Ceos (Plin. *Hist. Nat.* vii. 56*). Other inventors or importers of the alphabet are also mentioned (*Schol. Dionys. Thr. Bekk. Anecd.* p. 784), perhaps with as much reason as those to whom it is ordinarily attributed; for all that we are to understand by these

* A vase found at Agylla has inscribed on it, in alphabetical order, all the letters except *Ω*, the *digamma* and *koppa* being inserted in their proper places. The age of this vase is doubtful. See Franz, *Elementa Epigraphices Græcæ*, Berolini, 1840, p. 22. Cf. Lepsius, *Annal. Arch. Instit.* Vol. viii. 1836, pp. 188—203.

traditions is, that the alphabet was of Semitic origin, and this we can discover for ourselves from an examination of the characters and their arrangement. A knowledge of this fact, however, is of the utmost importance; for the chief difficulties occasioned by the Greek alphabet, have arisen from the circumstance, that its whole organization is adapted to a language as widely different as possible from the Greek, and that while the names and shape of the letters have been retained, their value has been materially altered. It will be instructive to inquire, what were the original 16 letters which the Greeks derived from their intercourse with the Phœnicians, and how they came to adopt in the first instance a part only of the Semitic syllabarium; for there are certainly more than 16 of the Greek letters which agree in name and shape with the Phœnician and Hebrew as they are known to us. The fact is, in our opinion, that the original Semitic alphabet contained only 16 letters. This appears from the organic arrangement of the characters*. The fundamental elements of a syllabarium are the mutes, the breathings, and the liquids. Of these the most necessary are the first two; after these would come combinations of strong breathings with mutes, or aspirated mutes; and the liquids, which are always secondary sounds, would be introduced last of all. In most alphabets we find the mutes divided into three classes: *tenues p, k, t*; aspirates *ph (f), kh (h), th*; medials *b, g, d*. The first and third orders do not, however, necessarily coexist. There are some nations, as for instance our own Highlanders in Wales and Scotland, who can never, even in English words, pronounce the medials, and even in those languages which have both orders in constant use, as in the Greek, if a *tenuis* becomes a medial, an adjoining *tenuis* is also changed into a medial, as *ἐπτά, ἑβδομος*. The old Italian and Runish alphabets had no medials, and the Semitic nations seem to have little need of *tenues*; there is no *p* in the Arabic language, and, at the present day, most of the Arabs pronounce their *ع caf* as *ga* (Lepsius, *Abhandl.* p. 16). Some European nations have adopted a set of vacillating middle sounds, which sometimes approach to the *tenues*, at other times to the medials; for example, it requires a very practised ear to distinguish whether a Saxon says *Leibsig* or *Leibsik*. If, therefore, the *tenues*

* This organic arrangement of the alphabet has been more or less noticed by several philologists, of whom the earliest seems to have been the acute and learned Dr. Richard Lepsius, in his essay *über die Anordnung und Verwandtschaft des Semitischen, Indischen, Athiopischen, Alt-Persischen, und Alt-Agyptischen Alphabets* (Zwei Abhandl. Berl. 1836). It is rather surprising that so obvious a phenomenon should have escaped the notice of any observing grammarian. The deductions, however, in the text do not appear to have been anticipated by any former writer. See Latham, *English Language*, p. 200.

were so little used by the Semitic nations, we may presume that the signs for them, as distinguished from the medials, were of later introduction, and that they would take up the remaining order of mutes,—the aspirates,—and even the liquids, before they introduced the tenues. Besides the mutes and breathings, the Hebrew alphabet, as it now stands, has four sibilants א, ס, צ, ש. Now it is quite clear that all these four sibilants could not have existed in the oldest state of the alphabet. Indeed we have positive evidence that the Ephraimites could not pronounce ש, but substituted for it the articulation ס (*Judges* xii. 6). We consider it quite certain, that at the first there was only one sibilant, namely, this ס or *samech*. Finally, to reduce the Semitic alphabet to its oldest form, we must omit *caph*, which is only a softened form of *coph*, the liquid *resh*, and the semivowel *jod*, which are of more recent introduction, as will be shown by and by. The remaining 16 letters appear in the following order: א, ב, ג, ד, ה, ו, ז, ח, ט, י, כ, ל, מ, נ, ס, ע, פ, ק, ר, ש. If we examine this order more minutely, we shall see that it is not arbitrary or accidental, but strictly organic according to the Semitic articulation. We have four classes each consisting of 4 letters: the first and second classes consist each of 3 mutes preceded by a breathing, the third of the 3 liquids and the sibilant, which perhaps closed the oldest alphabet of all, and the fourth contains the three supernumerary mutes, preceded by a breathing. The א, which heads the first class, is a simple breathing corresponding to the *spiritus lenis* of the Greeks, the ה which is placed before the second is a hard aspirate, the *spiritus asper* of the Greeks. It has been found difficult to determine the precise value of ע, which precedes the third order of mutes: it appears, however, to have been a kind of nasal breathing, of less frequent use, even in the Semitic languages, than either of the others, and therefore more easily corrupted in the pronunciation. The principles of the arrangement will better appear if we place the characters first vertically, and then in horizontal classes. According to the first system we have:

<i>Aleph,</i>	א	'h	First breathing (mere expiration),
<i>Beth,</i>	ב	B	} <i>Mediae.</i>
<i>Gimel,</i>	ג	G	
<i>Daleth,</i>	ד	D	
<i>He,</i>	ה	h	Second breathing (guttural aspiration).
<i>Vav,</i>	ו	BH	} <i>Aspiratae.</i>
<i>Cheth,</i>	ח	GH	
<i>Thet,</i>	ט	DH	
<i>Lamed,</i>	ל	L	} <i>Liquids.</i>
<i>Mem,</i>	מ	M	
<i>Nun,</i>	נ	N	

<i>Samech,</i>	ס	S	The sibilant.
<i>Ain,</i>	ע	"h	Third breathing (nasal aspiration).
<i>Pe,</i>	פ	P	} <i>Tenues.</i>
<i>Koph,</i>	ק	Q	
<i>Tav,</i>	ת	T	

In the horizontal arrangement we shall, for the sake of greater simplicity, omit the liquids and the sibilant, and then we have:

Breathings.	Labials.	Palatals.	Linguals.
א	ב	ג	ד
ה	ו	ז	ט
י	כ	ק	ר

In this we see, that, while the horizontal lines give us the arrangement of the mutes according to the breathings, the vertical columns exhibit them arranged according to the organ by which they are produced. Such a classification is obviously artificial; it is entirely Semitic, and if, as we shall now proceed to show, these sixteen letters constituted the original Greek alphabet, and were so arranged in that alphabet, it is an additional proof of the Semitic origin of the Greek characters; for, although it would be perfectly natural for a Phœnician to arrange his letters in such an order, no Greek could have thought of placing the *tenues*, of which he made the most constant use in his primary articulations, in the third order of mutes, and after the liquids.

Before we proceed to the Greek alphabet, it will be proper to mention an objection which might be raised to the completeness of the classification which we have pointed out. It may be said that ח has no right to be considered as an aspirate of ד, and that, therefore, there is at least one objection to our systematic arrangement of the alphabet. The Greeks considered their θ as an aspirate, not of δ but of τ*, because, in their system, the *tenues* were antecedent to the *medials*; but we are convinced that θ differed from ח only by the difference of Greek and Semitic articulation, and that ר corresponded in value as

* In pronunciation, however, θ corresponded rather to δ and ϑ than to τ: see *Greek Grammar*, 18, g, note. Some important etymological facts result from this observation, as will be shown in the proper place.

in name to τ . This view has been warmly advocated by Ewald (*Krit. Gramm. der Hebräisch. Spr.* § 30, 1), whose arguments have been violently combated by Redslob (Seebode's *neue Jahrbücher*, Vol. xx. p. 72). The following reasons seem to us to prove that originally $\beth$ must have been an aspirate and $\daleth$ a tenuis. In the first place, neither the Jews of the present day, nor the Septuagint translators, are a valid authority for the original pronunciation of the Semitic letters. Again, at the time when the sixteen letters mentioned above constituted the whole Hebrew alphabet, there was only one sibilant. Now all aspirates are approximate assibilationes, and the aspirated dental, in particular, often degenerates into a sibilant. There are reasons, therefore, for supposing that $\beth$ assumed eventually a hard sound, its original functions being discharged by some one of the newly-introduced sibilants. Again, nothing is more common than for *th* to be supplanted by *t*: this substitution has taken place in every language of Europe, except our own and that of Greece; and any one who has read Lucian's joke about the usurpations of τ will be aware that even the Greek language was not altogether exempt from it (*Judicium Vocalium*, § 10, pp. 95, 6). The occasional assibilation of the proper *t*, $\daleth$, is well accounted for by Ewald. But, besides these arguments, the very analogy of the arrangement, the correspondence of name, and the identity of the oldest Greek and Phœnician forms of $\beth$ and ϑ , $\daleth$ and τ (Gesenius, *Script. Linguaeque Phœnic. Monumenta*, pp. 30, 74, and plate I.), are a proof to us that ϑ corresponded to $\beth$ and τ to $\daleth$, although $\beth$ was rather an aspirate of *d* than of *t*.

101 It must now be shown that these 16 letters which constituted the basis of the Semitic alphabet were the same which were in the first instance introduced into Greece. At first no doubt they wrote from right to left, like their Phœnician instructors and other oriental nations, and we have still inscriptions in proof of this; afterwards they wrote $\beta\omicron\upsilon\sigma\tau\epsilon\omicron\phi\eta\delta\delta\omicron\nu$, or as the oxen plough the field, first to the right, and then to the left; and ultimately they wrote consistently from left to right. As they adopted one or the other method they turned their letters round in the direction of the writing; thus they wrote $\Sigma\epsilon\tau\alpha\iota\kappa\omicron\mu\epsilon\eta$ in the earlier times, and subsequently HEPMOKPATES (Lepsius, *Paläographie*, p. 11). Otherwise the letters differed very little from the Phœnician, as may be seen from a comparison of the 1st and 2nd plates in Gesenius. But of course, as the Greeks made very little use of rough breathings, and a great use of vowels, they would at an early period consider the signs of the three primary breathings in the Semitic alphabet, as marks for

the vowels with which they were pronounced, just as they subsequently vocalized another, the digamma. In the original syllabarium of the Semitic nations, each symbol represented some consonant or breathing with a short vowel-sound attached to it. According to the weight of the consonant or breathing, would be the weight of this vowel-sound. Now it is a philological fact, which will be developed in its proper place, that there are three varieties of the primitive vowel-sound, differing only in weight. The heaviest in *ā*, the lightest *ē*, and *ō* is intermediate in point of weight. Therefore as *He* was the heaviest, *Ain* the next, and *Aleph* the lightest of the three breathings, they would be uttered by the vowels *ē*, *ō*, *ā* respectively, and, when the breathings were omitted, as would very soon be the case, these three vowels would stand in their place. The alterations which the Greeks introduced at an early period in the letters which they borrowed from the Phœnicians are distinctly alluded to by ancient writers: Herodotus says (v.58): οἱ δὲ Φοίνικες οὗτοι οἱ σὺν Κάδμῳ ἀπικόμενοι—ἐσῆγαγον—ἐς τοὺς Ἕλληνας—γράμματα—πρῶτα μὲν, τοῖσι καὶ ἅπαντες χρέωνται Φοίνικες· μετὰ δέ, χρόνον προβαίνοντος, ἅμα τῇ φωνῇ μετέβαλον καὶ τὸν ὀρθμὸν τῶν γραμμάτων—περιοίκεον δὲ σφεας τὰ πολλὰ τῶν χώρων τοῦτον τὸν χρόνον Ἴωνες, οἱ παραλαβόντες διδαχὴν παρὰ τῶν Φοινίκων τὰ γράμματα μεταῤῥοθμίσαντες σφέων ὄλγα ἐχρέωντο. Similarly, Diodorus (iii. c. 67, p. 297 Dindorf): φησὶ τοίνυν (Διονύσιος) παρ' Ἑλλήσι πρῶτον εὐρετὴν γενέσθαι Αἰνὸν ὀρθμῶν καὶ μέλους, ἔτι δὲ Κάδμου κομίσαντος ἐκ Φοινίκης τὰ καλούμενα γράμματα πρῶτον εἰς τὴν Ἑλληνικὴν μεταθεῖναι διάλεκτον, καὶ τὰς προσηγορίας ἐκάστω τάξει καὶ τοὺς χαρακτῆρας διατυπῶσαι. It is obvious that these authors allude neither to any change in the order of the letters, nor to any difference in the way of writing them, as from left to right, instead of from right to left, but to a slight alteration in the form (ὀρθμός, Herod. comp. Athenæus, iii. p. 125 f, διατυπῶσαι, Diodor.) and pronunciation (φωνή) of some few of them (σφέων ὄλγα). With regard to the change of form, it must be supposed that these authors rather spoke from a comparison of the Greek letters of their own time, with those of the Phœnicians, than from any minute antiquarian researches on the subjects. But of course the change of pronunciation principally refers to the substitution of vowels for breathings.

The grammarians tell us that the original 16 letters of the Greek alphabet were α, β, γ, δ, ε, ι, κ, λ, μ, ν, ο, π, ρ, σ, τ, υ (Schol. Dion. Thr. p. 781). That this was not the case will appear from the following considerations. It is well known that the sixth letter of the old Greek alphabet was not ι, but F, βαῦ, *vau*, or the *digamma*, as it was indifferently termed, which, under the form ζ, was used to the latest

period as a mark for the number 6; therefore *v*, which is said to have been a sort of substitute for this letter (Marius Victorinus, pp. 24, 68), could not have been included in the old alphabet. We shall show presently that *ι*, like the Hebrew *jod*, was a secondary and derived letter, as was also the letter *ο*. The oldest *κ*, which was *koppa*, *Ϟ*, stood next to *π*, and there could hardly have been two *κ*'s in a primeval alphabet. We assert, then, that *ι*, *ο*, and *υ* did not form a part of the old Greek alphabet of 16 letters, and that *κ* or rather *Ϟ* stood after *π*. Omitting *ι*, *ο*, *υ*, and *κ* from the letters mentioned by the grammarians, we have with *Ϝ* and *Ϟ* only fourteen. Which were the remaining two? The letters which stood next to *ε* in the complete Greek alphabet were *η* and *θ*, and we are convinced that they followed *Ϝ* in the original 16, though the former had subsequently a very different value from that which it originally possessed. In old written monuments which have come down to us, *η* or *H* is used as the common mark of aspiration; and therefore corresponded to the Hebrew *ה* or *he**, i. e. the *double* was used for the *single* aspirate after the latter had become a mere *ἡ ψιλόν*; but this is sufficient to prove the antiquity of the character; *θ* also occurs in very old inscriptions. A further confirmation of the opinion that *Ϝ*, *η*, *θ*, occupied the same places in the original Greek alphabet that *vav*, *cheth*, and *teth* did in the old Semitic, is furnished by the fact, that, when the Greeks left off writing the *Ϝ* and employed *H* to represent a long *ε*, they added to *τ*, the last letter of their old alphabet, *υ* and *φ* as approximate representations of *Ϝ*, and *χ* to replace *H*. The two corresponding alphabets of 16 letters were, then, as follows:

א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ	ס	ע	פ	ק	ר
A	B	Γ	Δ	E	Ϝ	H	Θ	Α	M	N	Σ	Ο	Π	Ϟ	T			

102 In the Greek alphabet, as it is now given in the grammars, *Ϝ* and *Ϟ* are omitted, and 10 other characters added to these. When and by whom they were invented or introduced is of little importance in regard to our present purpose. Thus much may be conjectured with safety. As soon as the Greeks ceased to employ *Ϝ*, and *H* (as an aspirated consonant), which was very early, *υ*, *φ*, and *χ*, must have come into use; they all occur in the oldest inscriptions; indeed it is only on the *columna Naniana* that the two latter are written *PH*, *HK*, and the genuineness of that tablet has been doubted; at all events they were antecedent to *ξ* and *ψ*, which are written *HΣ*, *ΦΣ* in

* Thiersch supposes that *H* corresponded to the Hebrew *ח*, *cheth*; he says (p. 24 Sandf.): "thus the liver is named in Hebrew *chapar* (חֶפֶר), Greek *ἥπαρ*, which was written *HEΠAP* (*HAΠAP*)." Can he have mistaken the *daleth* for *resh*, the *beth* for *pe*, and the *caph* for *cheth* in the Hebrew *כֶּפֶר* *kâvêd*?

old inscriptions*. The Semitic *Tsade* (צ) and *Caph* (כ) of course suggested ξ and κ; and it is also clear that ι and ρ were derived from their Semitic equivalents *Iod* (י) and *Resh* (ר). Besides *Tsade* the Hebrew alphabet had another dental sibilant, *Zain* (ז), and the Greeks borrowed this under the name Σάν. It is not known what was the shape or value of this letter as used by the Greeks. It seems to have represented a modified articulation of Σίγμα, for which the Dorians used it as a substitute (Herod. i. 139). Pindar, in speaking of the ἄσιγμοι ὥδαι of Lasus, says (*Fragm.* 47), that in these artificially constructed and longspun Dithyrambs the σάν was falsified (κίβδηλον); by which he means merely that the sibilant in general was intentionally omitted or slurred over†. But whatever may have been the distinction between σάν and ξῆτα or σίγμα, it is obvious that it very soon fell out of use, and as ξῆτα stands in the place occupied by the Hebrew *Zain*, it may be inferred that *Zain* and *Tsade* were borrowed at the same time, and placed side by side in the gap occasioned by the loss of *Vav* or פ. As in the Hebrew alphabet *Iod* and *Kaph* are placed in the interval between the aspirates and the liquids, so in Greek their representatives ι and κ stand between ϑ and λ: and ρ stands in the gap left by the omission of Ϙ, which corresponds to the place of *Resh* in the Hebrew alphabet. It appears to us that σίγμα is a pure Greek word, derived from σίζω, and expressing the hissing articulation of the sibilant. Although its place in the Greek alphabet after ρ corresponds to that of *Shin* in the Hebrew alphabet after *Resh*, this is not to be taken as any evidence of the derivation of σίγμα from ש, which is represented in name, form, and, originally, in pronunciation by ξῖ, whereas the shape of σ and the use of σίγμα as the oldest and simplest sibilant should induce us to derive it from *Samech*. When first imported it was undoubtedly called σάμ: but as the Hellenic articulation changed the final μ to ν, it became identified with σάν, from *Zain*; and while it assumed this name among the Dorians, the Ionians substituted the Greek term σίγμα. If, however, σίγμα was originally σάμ, or *Samech*, it must have formed a part of the Cadmean syllabarium of 16 letters, and therefore, as we have seen, must have stood immediately after ν. This place is now occupied by ξῖ, the representative of *Shin*, and conversely σίγμα has taken the place of *Shin* after ρ. The only reason for this interchange, which occurs

* The reason of this combination appears to be, that σ was considered as a sort of aspirate, and therefore like other aspirated letters communicated its rough breathing to the preceding letter: thus we have ΕΠΙΔΕΧΣΟΝΙ for ἐπὶ Δέγωνι, ΕΧΣΑΜΟΥ for ἐκ Σάμων, ΓΡΥΦΣ for γρόψ, &c. The same is the case with ρ: thus we have ἄθρακτοι for ἀτάρακτοι (Hesych.) and προίμων for προοίμων, &c.

† See *The Theatre of the Greeks*, 6th ed. p. [27].

to us, is the following. It appears that $\sigma\acute{\alpha}\mu$ was called $\sigma\acute{\iota}$, before it got the name of $\sigma\acute{\iota}\gamma\mu\alpha$. Thus, the combinations $\sigma-\pi$ and $\pi-\sigma$ are called $\sigma\acute{\alpha}\mu-\pi\acute{\iota}$ and $\pi-\sigma\acute{\iota}$ respectively. Now *Shin*, with the point on the left corner (ψ), is pronounced $\sigma\acute{\iota}$; and when this letter was introduced into the Greek alphabet, it is conceivable that $\xi\acute{\iota}$, with the original power of ψ , i. e. *sh*, took the place of $\sigma\acute{\iota}$, which was transferred, with its new name $\sigma\acute{\iota}\gamma\mu\alpha$, to the place of *Shin*, which, in its second value ψ , no less than its first value ψ , stood in the Hebrew alphabet between *Resh* and *Tau*. We have already mentioned that ν and φ were added to the original alphabet, i. e. placed after τ , to represent approximately the obsolete digamma, and that χ followed them when the double aspirate was used as a simple *h*. The three remaining letters ψ , ω , and Υ probably stand in the order of their invention, as mere matters of convenience, at a comparatively late period. In fact they are ligatures or contractions rather than letters; and the last soon went out of use again except as a numeral sign.

103 Some interesting deductions may be made from the later or phonetic hieroglyphs of the ancient Egyptians, which must be considered as a form or application of the Semitic alphabet. The phonetic syllabarium of Champollion and Lepsius may be reduced ultimately to the representatives of 15 different articulations. The Coptic language, which is taken as the standard of pronunciation, has, strictly speaking, no medial mutes, *b* and *d* for instance being expressed by *mp* and *nt*. But it does not follow from this that the ancient Egyptian abandoned the genuine Semitic preference for the medial articulation. As it stands, the hieroglyphic alphabet comprises (a) 3 original mutes; in Coptic π , κ , τ ; (b) 3 liquids, λ or ϱ , μ , ν ; (c) 3 sibilants and an aspirate, *s*, *ch*, *sh*, *h*; (d) 2 ultimate breathings or vocalized gutturals, *a* and *i*; (e) 3 supplementary labials, *v*, *f*, *u*. It seems probable that *a* represented the *ain* as well as the *aleph* of the Hebrews, and that it sometimes approximated even to *he*, which however has a representative of its own. The Hebrew alphabet, in its original form, is a complete expression of the necessary sounds of the language. We see in this hieroglyphic alphabet, on the other hand, an ambiguity as to the original mutes, and also as to the liquids *l*, *r*; and while it is almost redundantly supplied with secondary labials and sibilants, it has only two vowels, *a* and *i*; and as the former is expressed by *one* and the latter by *two reeds*, it is clear that the derivation of *jod* or *chirik* from *aleph*, which is so common in Hebrew, is fully recognised in old Egyptian. All this shows us how fortunate the Indo-Germanic races have been in the possession of a complete alphabet, which the

Egyptians with all their combinations of ideographic, determinative, and phonetic signs, were never able to realise in a satisfactory manner.

104 The Arabic syllabarium, on the other hand, is one of the most complete and systematic collections of phonetic signs which the ingenuity of man has hitherto collected. Originating in mutilations or corruptions of the Cufic, and ultimately of the Syriac characters, it has received a new and highly artificial arrangement, depending rather on the shapes of the letters than on the organic connexion of the sounds which they represent. And a distinction by means of points placed above or below the character has taken the place of an original difference in the form of the character itself. Thus, *b* and *t*, which belong to different organs, are placed side by side, and represented by the same character, the former having a point below, the latter a point above. In the middle of a word, *n*, *t*, *th*, *b*, and *y* are discriminated only by means of the punctuation. The addition of points above the line converts the liquid ن *n*, into the mutes ت = *t* and ث = *th*, and by similar additions we can aspirate or assibilate ح = *h* into خ = *hh*, د = *d* into ذ = *dz*, ر = *r* into ز = *z* and ژ = *zh*, س = *s* into ش = *sh*, ص = *ç* into ض = *dh*, ط = *t* into ظ = *z*, ع = *ain* into غ = *ghain*, و = *w* into ف = *hv* = *f*, and ق = *hhv* = *q*; whereas an addition of points below the line converts the sonant ج = *j* into the surd چ = *ch* in the Persian use of this alphabet. It is worthy of remark, too, that in the Syriac alphabet the cognate *r* and *d* are distinguished only by points placed above and below the sign respectively; and in an ancient inscription belonging to the Royal Asiatic Society, in which the name of Sapor seems to occur, the mute *d* is distinguished by a point from the liquid *r**.

105 (2) *Analysis of the Greek Alphabet.*

We have now seen in what state the Semitic syllabarium was imported into Greece. Before we proceed to consider how the Greeks modified and adapted to their own language a notation which, though organically perfect in respect to the Semitic articulation, was but a poor instrument for the expression of the language of Homer, and what value they put on the different characters, it will be as well to examine with some minuteness the Sanscrit alphabet, which has

* For this observation we are indebted to Mr. Edwin Norris, Secretary to the Royal Asiatic Society.

lost all traces of the Semitic arrangement, and has been made, by an elaborate exertion of Brahminical ingenuity, a most suitable and complete exponent of a language the same in kind with that of ancient Greece*. The Sanscrit alphabet, called by the native Grammarians *Dêva-nâgarî* or "the writing of the Gods' city," consists of forty-eight characters, which are arranged according to an admirable system. First of all are placed the simple vowels, then the diphthongs, and the marks representing the final sounds of *n* and *h*. After these come the consonants, divided into three classes, mutes, semivowels,

* There has been some difference of opinion among Sanscrit scholars respecting the Semitic origin of the Indian alphabet since James Prinsep first indicated the striking resemblances between these characters and the ancient Greek. Dr. A. Weber, who has examined the question with some minuteness (*Ueber den semitischen Ursprung des indischen Alphabets*. Indische Skizzen, pp. 125 sqq. cf. p. 77), has come to the conclusion that the letters of the oldest Indian inscriptions are of Phœnician origin, those of the Bactrians being probably Aramaic (p. 145).

Mr. Prinsep (Vol. i. p. 434, 5, ed. Thomas) had identified the oldest letters of the Greek alphabet in particular with the corresponding characters of the oldest Sanscrit. He says, "We might almost dare to advance that the oldest Greek (that written like the Phœnician from right to left) was nothing more than Sanscrit turned topsy-turvey." But his editor, Mr. Thomas (ii. p. 42), considers Weber's theory to be "altogether untenable," and says (p. 43), that "to judge by internal evidence the Pâli alphabet of Asoka's day bears every impress of indigenous organization and local maturation under the special needs and requirements of the speech it was designed to convey." And this is also the opinion of Barthélemy St. Hilaire, whom he quotes. Mr. Monier Williams (in a letter to "The Times," 31 Dec. 1858) seems to distinguish entirely between the alphabet of the inscriptions and the *Dêva-nâgarî*. He says: "The spoken Sanscrit which is found on the rock inscriptions of 300 years B. C., and which is the direct source of all the languages now current among the Hindoos, was a kind of patois as different from the learned Sanscrit as Italian is from Latin, and this patois had its own written character quite distinct from the present form of the *Dêva-nâgarî*." And in a note he adds: "The Sanscrit-speaking immigrants must have brought with them their own character, or invented it very early, reserving to it the exclusive privilege of expressing their sacred language."

In our opinion the intercourse of the Semitic nations with *Ophir* (that is, according to Lassen, the land of *Abhîra* at the mouth of the Indus) about 1000 B. C. is sufficient to account for the acquaintance of the Indians with the Phœnician character at a very early period; and the subsequent changes in the direction of the writing and in the position of the characters is quite analogous to what took place in Greece. With regard to the *Dêva-nâgarî* we have already suggested that the Brahmins, whose Vaidic period is placed about 1400 B. C., had no writing to serve as a vehicle for their sacred literature, and that they adopted the characters of the cognate tribes already settled in Hindostan. That they ingeniously extended and modified these characters, introducing the uniform frame opening to the left, may be inferred from the elaborate ingenuity of this syllabarium, and the little artifices for the expression of cognate sounds to which we have called attention in the text (§§ 106—108).

and sibilants. The mutes are subdivided into five orders, according to the organs by which they are uttered. Besides these divisions the whole alphabet forms two great classes, *surds* and *sonants**. "The term *surd*," says Wilkins (*Grammar*, p. 15), "is applicable to such letters as, in the first effort to form them, admit of no vocal sound: and the term *sonant* to such letters as are attended by an audible murmuring, as it were, of the voice." The *surds* are the first two letters of each of the five orders of mutes, one being aspirated and the other unaspirated, together with the sibilants, and the aspirate which is classed with them. All the rest of the consonants, and all the vowels and diphthongs, are *sonants*. The table which follows gives the Sanscrit letters with the transcription in English which we have adopted in this work.

VOWELS; all sonant.

Simple vowels अ *a*, आ *â*; इ *i*, ई *î*; उ *u*, ऊ *û*; ऋ *ri* or *r*,

ॠ *rî* or *rr*; ए *li* or *l*, ऐ *lî* or *lr*.

Diphthongs ए *ê*, ऐ *ai*; ओ *ô*; औ *au*.

• *n*; : *h*.

CONSONANTS.

(1) Mutes.

	Surd.		Sonant.	
Gutturals	क <i>k</i> ,	ख <i>k'h</i> ;	ग <i>g</i> , घ <i>g'h</i> ; ङ <i>ng</i>	} <i>n</i> .
Palatals	च <i>ch</i> ,	छ <i>ch'h</i> ;	ज <i>j</i> , झ <i>j'h</i> ; ञ <i>ny</i>	
Linguals	ट <i>t'</i> ,	ठ <i>t'h</i> ;	ड <i>'d</i> , ढ <i>'d'h</i> ; ण <i>'n</i> .	
Dentals	त <i>t</i> ,	थ <i>t'h</i> ;	द <i>d</i> , ध <i>d'h</i> ; न <i>n</i> .	
Labials	प <i>p</i> ,	फ <i>p'h</i> ;	ब <i>b</i> , भ <i>b'h</i> ; म <i>m</i> .	

(2) Semivowels; all sonant.

य *y*, र *r*, ल *l*, व *v*.

* Sir Graves Haughton distinguishes them also as *sharps* and *flats* (*Beng. Gram.* p. 151).

(3). Sibilants; all surd.

श ङ*, ष *sh*, स *s*, ह *h*.क्ष *ksh*.

Colebrooke in his Grammar gives the value of these letters as follows: *a* is pronounced as *e* in *her*, *i* in *sir*, *u* in *sun*; *â* as *a* in *ball*; *i* as in *fit*; *î* as *ee* in *feet*; *u* as in *pull*; *û* as *oo* in *pool*: *ri* as in *merrily*; *rî* the same long; *lri* as in *revelry*; *lrî* the same prolonged; *ê* as *e* in *there*; *ai* as *i* in *fine*, or *y* in *my*; *ô* as in *go*; *au* as *ou* in *thou*; *k* as *c* in *cause* or *k* in *kin*; *kh* as in *ink-horn* or as *c'h* in *cachexy*; *g* as in *gain*; *g'h* as in *log-house*; *ng* as in *sing*; *ch* as in *church*; *ch'h* the same aspirated; *j* as in *judge*; *j'h* the same aspirated; *ny* as in *onyon* and as *n* in *singe*; *t* as in *tin*; *t'h* as in *nut-hook* or as *te-h* in *White-hall*; *d* as in *deal*; *dh* as in *red-haired*; *n* as in *noble*; *p* as in *pen*; *ph* as in *hap-hazard*; *b* as in *ball*; *bh* as in *abhor*; *m* as in *man*; *y* as in *yet*; *r* as in *run*; *l* as in *hull*; *v* as in *value*; *ç* is a *palatal*; "the proper sound of this letter is produced," says Wilkins, "by applying the tip of the tongue to the forepart of the palate, and passing the voice, as in pronouncing our *s*;" *sh* is pronounced as in *shoe*, except in the West of India, where it is nearly equivalent to *kh*, and it is a *lingual*; *s* is pronounced as in *sin*, and is reckoned as a *dental*; *h* as in *hair*; *ksh* as *cti* in *fiction*. The linguals 't, 'th, 'd, 'dh, 'n, are sunds peculiar to the Indian articulation. "This series of consonants," says Wilkins, "is pronounced by turning and applying the tip of the tongue far back against the palate; which, producing a hollow sound as if proceeding from the head, it is distinguished by the term *mûrddhanya*, which Mr. Halhed, in his elegant grammar of the Bengal language, has translated *cerebral*."

The marks • (*n*) and : (*h*) are called *anu-svâra*, "after-sound," or "after-vowel," and *vi-sarga*, "leaving out," *ecthlipsis*; the former is an abbreviation of nasal consonants at the end of a syllable, the latter a substitute for the letters *s* or *r* at the end of a word. The process by which the diphthongs are formed from the simple vowels is of the most extensive application in Sanscrit, and is also of importance in Greek. When a short *a* is placed before either of the vowels *i*, *u*, we have the diphthongs *ê* = *ăi* and *ô* = *ău*; this change is called *guṇa*

* We adopt this transcription because श so frequently corresponds to a Greek *z*, and we are desirous of pointing out that it is but a softened guttural. If what we have said in this chapter with regard to the real value of *z* in Greek and Zend were as well known as we could wish it to be, we should not hesitate to adopt *z* instead of *ç* as a representative of the first Sanscrit sibilant.

or "strengthening;" when, again, the $\check{a}$ is placed before the diphthongs $\acute{e}$, $\acute{o}$, we have the other diphthongs $ai = \check{a}\check{a}i$, and $au = \check{a}\check{a}u$; this change is called *vriiddhi* or "increment." It must be remarked that $\acute{a}$ is also a *guṇa* of $\check{a}$, and the other vowels, $\acute{r}$, $\acute{l}$ become $a\acute{r}$, $a\acute{l}$ by *guṇa*, and $\acute{ar}$, $\acute{al}$ by *vriiddhi*. "The vowel *lri* is only found in the verb *klrip* and its derivatives. We remember no instances of the long *lri* in any Sanscrit word: Bhattoji, in commenting on Pānini, I. 1, 9, says that it is not used. *Siddhāntakaumudī*, fol. 1 b." (Rosen, *Journal of Education*, viii. p. 340, note).

106 An examination of the figures, which compose this wonderfully systematic alphabet, will lead to very important conclusions with regard to the subject now before us. It is by this means alone that we can ascend from the very artificial order in which the Hindu grammarians have arranged it to its primitive state, and to the order of its formation. In the first place it must be remarked, that, like the Semitic alphabet, it was originally a syllabarium; in other words, it had no vowels, and was written from the right to the left. A proof of the latter is afforded by the fact, pointed out by Lepsius (*Paläographie*, p. 10), that with few exceptions all Sanscrit letters have a frame which opens towards the left; and of those too which have no frame, the vowels $\acute{i}$, $\acute{u}$, $\acute{e}$, $\acute{o}$, the guttural $\acute{ng}$, and the lingual $\acute{d}$ are all turned towards the left; so that the ancient order of writing must have been in that direction. The Greeks, and other nations who have borrowed the Semitic alphabet, turned round the letters when they altered the direction of their writing, whereas the Indians have left unaltered those letters which were invented or introduced before they changed their manner of writing. The only letters which were turned towards the right were the diphthongs $\acute{e}$, $\acute{ai}$, three of the linguals ' $\acute{t}$ ', ' $\acute{th}$ ', ' $\acute{dh}$ ', the aspiration $\acute{h}$, the semivowel $\acute{r}$, and the suffixes, which form the vowels $\acute{r}$, $\acute{r}r$ from the sign generally used to denote $\acute{a}$, and the vowels $\acute{l}$, $\acute{l}r$, from the sign for $\acute{l}$. This is at least *primâ facie* evidence for the conclusion that these last characters are of more recent introduction. It may seem strange that the lingual ' $\acute{d}$ ' should be older than the dental $\acute{d}$ ', while the other letters of the dental class are older than the rest of the linguals. Perhaps ड and ढ have interchanged their pronunciation like the Hebrew כ and ק . It seems probable that ड , ध and ढ were the corresponding characters in the dental class for $\acute{d}$, $\acute{dh}$, and $\acute{n}$, and that न was originally the $\acute{n}$ of the guttural class: ड differs from ड only by a kind of *anusvāra* mark, and न is only a reversed ग .

107 After what has been said on the origin of alphabets in general, no one will suppose that the vowels were from the first distinguished from the consonants in the *Dēva-nāgarī* alphabet. Palæography enables us to point out their origin. The characters which we have given for the vowels are used only at the beginnings of words; for their expression in the middle of words a number of marks analogous to the Hebrew points are substituted, as follows:

अ	$\left\{ \begin{array}{c} \text{आ} \\ \text{।} \end{array} \right\}$	â	$\left\{ \begin{array}{c} \text{इ} \\ \text{।} \end{array} \right\}$	i	$\left\{ \begin{array}{c} \text{ई} \\ \text{।} \end{array} \right\}$	î	उ	u	ऊ	û	ऋ	ṛ	ॠ	ṛṛ
.....														
	लृ	lṛ	लृ	lṛṛ	ए	ê	ऐ	ai	ओ	ô	औ			au

The short original vowel, with which every consonant is articulated, is not written when it follows a consonant, because in the primitive syllabarium that vowel was always presumed in the first instance, and the vowel-marks were subsequently invented to point out that a different vowel-sound was intended in the particular case. The bar which designates the long $\bar{a}$ is merely a fulcrum to show that the voice must dwell on the syllable. It cannot be a representative of the vowel $\hat{a}$, for it is written in cases where no $\hat{a}$ is implied, as in । , $\hat{o} = \hat{a}\hat{u}$. The figure which appears in the complete signs of a , $\hat{a}$, ṛ , ṛṛ , $\hat{o}$ and au , is obviously a mark of the gentle breathing with which all initial vowels were pronounced, and probably corresponded as nearly as possible to the Hebrew *Aleph*. From this it appears that ṛ , ṛṛ , were originally indistinct vowel-sounds of r preceded by a breathing. Bopp considers ṛ as a mutilation of ar (*Vocalismus*, p. 157), and Lepsius thinks that the consonant r was formed from this vowel (*Paläographie*, p. 49). In Zend there is no character answering to the Sanscrit ṛ , but in corresponding words the Sanscrit ṛ is represented by $\check{r}\check{e}$ (Burnouf, *Yaçna*, p. 1). It matters very little whether we place the vowel before or after a liquid, and we constantly find the same root with the vowel sometimes before the liquid and sometimes behind it. It is remarkable, that, in our own alphabet for instance, while we articulate the consonants by means of vowels placed *after* them, we always utter the necessary vowel *before* the liquids and s : thus we say *be*, *ce*, &c. but *em*, *en*, &c. To adduce another very familiar instance, the sign of our plural is *-ne* as well as *-en*, *-se* (written *-ce*) as well as *-es*: thus we have *breth'r-en*, *child'r-en*, *ox-en*, but *ki-ne*, *swi-ne*; and *church-es*, *speech-es*, but *dice*, *pence*. The letter r is altogether a secondary one. In the articulations of some provinces among ourselves, it is still unpronounceable, and in almost

every language it stands for some earlier letter; most generally for *l*, as in the Sanscrit *sūrya*, comp. *sol*, ἥλιος, Goth. *sauil*; Sanscrit *pūr*, comp. πῦρ, *plenus*, *full*; and even in modern languages, as in the words *apôtre* from *apostolus*, *épître* from *epistola*, *titre* from *titulus*, &c.; it stands for *s*, as in the Laconian σῶρ for θεός, and in the words *Valerius*, *Furius*, *arbor*, *labor*, *vapor*, *clamor* and *lares*, which Quintilian tells us (i. 4, § 13) were originally written *Valesius*, *Fusius*, *arbos*, *labos*, *vapos*, *clamos* and *lases*. After a guttural, especially in Latin, *r* appears as the representative of an original *sh* (see below, § 160). When it appears in the old Italian languages, as a substitute for *d* (*Varro-nianus*, pp. 82, 255), e. g. in *ar-cesso* by the side of *accerso* for *ad-ced-so* = *accedere sino* (*Varron*. p. 352), it must be regarded as having passed through the intermediate articulation *th*. Palæography shows that *r* is connected both with *d* and its assibilation *z*. In the Hebrew and Syriac alphabets *d* and *r* are represented by slightly different forms of the same character (ד, ר), and in Arabic there is a similar correspondence between *Dal* and *Dzal* (ذ, ذ), and between *Ra* and *Za* (ز, ز). For other changes see Lepsius (*Abhandlungen*, p. 12) and Grimm (*Deutsche Gramm.* i. p. 581). It is a proof of the more recent state of the Zend in the monuments which have come down to us, that the *r* has entirely superseded the *l* in that language (Burnouf, *Yaçna*, p. lxxviii); and in the Behistun Inscription *r* and *s* are represented by the same character turned in different directions, for 𐎠𐎡 is *r*, but 𐎠𐎢 is *s*. The nasal liquids *m* and *n* are in fact modifications of the medials *b* and *d*, to which they sometimes revert; a person who has a cold in his head, or a country actor trying to be impressive, will always pronounce his *m*'s as *b*'s and his *n*'s as *d*'s. We should therefore expect that the *m* would be derived from the *b*, and the *n* from the *d*, if the principle of association held. This appears to have been the case in Sanscrit, as will be seen by comparing भ *bh* with म *m*, and ड *d* with ङ. It seems that *l* was a vowel in Sanscrit before it became a consonant; how this could be may be inferred from the use of the *l mouillé* in French. It was in fact the first form of the *r*, or rather they were both produced from a sound between the two (like the Chinese *eul*), which was the more like a vowel the older the language was (Lepsius, *Abhandl.* pp. 9, 10). We have mentioned above that the ancient Egyptians had only one sound for *l* and *q*.

108 The first thing which strikes us in the *Dēva-nāgarī* consonants is the contrast which they present to those of the Semitic alphabet. Omitting the palatals and linguals, the former of which are

immediately derived from the gutturals, and the latter peculiar to the Indian organs of speech, we have the same three sets of fundamental mutes as in the Hebrew alphabet. We remark, however, this striking difference: in the *Dêva-nâgarî* alphabet the tenues, which are most suited to the pronunciation of those who speak the Indo-Germanic idioms, are placed first, the medials last. Besides, the Hindu grammarians have begun with those letters which are pronounced in the back part of the mouth, namely the throat, and have gone on through the others in order, ending with those letters pronounced by the lips. This is of course very good as a technical arrangement; it seems, however, that the order of creation is that given by the Hebrew alphabet, namely labials first, then gutturals, and lastly dentals. Again, it is observable that there are two orders of aspirates in this alphabet, sonants as well as surds, whereas the Greek and Hebrew have the latter only. At first, probably, the Hebrew aspirates were, as we have shown, modifications of the medials, but, if we are to place any reliance on the assertions of modern Hebraists, they all approximate to the tenues, and one of them, the *Teth*, has actually become a dental tenuis. It is very certain that the Greek aspirates were ultimately modifications of the tenues and not of the medials; nevertheless, in words of the same origin, the Sanscrit *bh*, *dh*, are represented by the Greek and Latin φ , f and θ : thus the Sanscrit root *bhr* corresponds to the Greek and Latin $\varphi\acute{\epsilon}\rho\omega$, *fero*, and *madhu* to $\mu\acute{\epsilon}\theta\upsilon$: *ph* seldom occurs, and *th* is consistently represented by τ . This indicates in our opinion a change in the value of the *Dêva-nâgarî* characters, analogous to that which we have hinted in the case of *d* and *d'*, *n* and *ng*; for there can be no doubt, that, if the tenues were really anterior to the medials in this alphabet, their aspirates would be first employed: besides, we find in these secondary aspirates a continual shifting and interchange as well in form as in usage, which shows that they had not a distinct independent existence from the first; Ψ which is in form only a modification of Φ , is often represented by the same letter in cognate languages, thus *dadhâmi* = $\tau\acute{\iota}\theta\eta\mu\iota$, *gharma* = $\theta\acute{\epsilon}\rho\eta\eta$; Ψ and Φ are also interchanged; thus *dhṛ* and *bhr* both signify "to carry*." If we revert to general principles we can hardly doubt that the aspirate must have been prefixed in the first instance to the articulations which it modified. Thus, if we compare the first and second lines of the original syllabarium (above, § 100), we shall conclude that as $\aleph$ differs from η by the *h* prefixed to the latter, so γ must have

* This may perhaps be explained by the fact that in the Prâkrit there is a tendency to substitute the aspirate alone for an aspirated letter, as *gahîra* for *gambhîra*, - "deep," *sahâ* for *sabhâ*, "an assembly" (Wilson, *Hind. Dram.* p. 70).

been originally *hv* or *hb*, π must have been *hg*, and ψ *hd*. We shall see that in the Greek $\beta\alpha\tilde{\upsilon}$ the aspirate always preceded the labial; and there is no reason why ϑ should not have been originally *hd*, just as ρ , the cognate dental liquid, was undoubtedly *hr* as well as *rh*. In fact, as we shall see, the metathesis of aspirates and sibilants is common in all languages. The aspirates of the guttural class are very seldom used, but, when they are, *kh*, not *gh*, corresponds to the Greek χ , as in $\kappa\acute{o}\chi\chi\eta$ compared with *çankha*; $\delta\upsilon\nu\chi\text{-}\varsigma$ ($\delta\upsilon\nu\chi\omicron\varsigma$) compared with *nakha*, &c. We think that *th* must have been originally an assibilation rather than an aspirate of *t*. It will be shown in another place that the Greek ξ or assibilated δ is a representative of a sound resembling *sh* or the French *ch*, produced by combining a guttural or a dental with *y*. Such a sound is the Sanscrit $\ç$, for this is almost always a representative, under a softer form, of the Greek χ , and of the Lithuanian *sz*, which is pronounced in the same way as the Sanscrit letter. It is the tendency of all languages to soften or assibilate their hard sounds. We have plenty of instances of this even in the modern languages of Europe; in French it is particularly common; thus, from *camera* we have *chambre*, from *audere*, *oser*, from *canis*, *chien*, &c.; in England we have in the North, where the older Saxon is rife, *kirk*, *wick* (*Alnwick*), *brigg*, *dyke*, &c., which in the South are softened to *church*, *wich* (*Greenwich*, *Brom-which-ham*), *bridge*, *ditch*, &c. In the ancient languages the same thing is observable: thus the older forms preserved in $\delta\acute{\alpha}\chi\upsilon$, *lacryma*; $\lambda\acute{\iota}\kappa\omicron\varsigma$, $\acute{\iota}\pi\pi\omicron\varsigma$, *equus*; $\delta\acute{\epsilon}\kappa\alpha$, *decem*; &c. are softened into the Sanscrit *açru*, *açva*, *daça*, and the Lithuanian *aszara*, *aszwa*, *deszintis*, &c. This change of the hard pronunciation of *c* has taken place without a corresponding change of form in the modern Italian, and is regulated by the appearance of the vowels *e* or *i* after it. The same is the case with the *g* in English, Italian, and French. A good instance of the change in the pronunciation of a dental caused by the addition of *i* or *y* is furnished by our way of pronouncing such words as *nation*, *revolution*. Different languages have various methods of expressing the sound *sh*, as resulting from an aspiration or assibilation of the gutturals and dentals: and sometimes the same language has several symbols for it. The Sanscrit, for instance, has a direct representation, or rather, two distinct signs for it; in other alphabets it is represented by *z*, *j*, *y*, or, in the case of the dental, by ϑ . The symbol *j* often degenerates into the simple vowel *i*, just as the symbol *v*, which represents the labial aspirate, degenerates into the vowel *u*: in fact, this is the way in which these vowels are formed, and in this case it may be said, that all that part of the softened consonant, which bore any relation to the original consonant, is lost; a phenomenon which often presents itself in

language, and which is also an explanation of the change of aspirated consonants into *h*, and of their interchange with one another. We may take this opportunity of correcting a theory which has been brought forward by two of the most distinguished philologists of the present day, and which, though highly ingenious, appears to us to rest upon a false principle. Grimm (*Deutsche Gramm.* i. p. 187) justly remarks that $j : i = \bar{v} : u$, and that the row of labials *p, b, f, v, u* is parallel to the row of gutturals, *k, g, ch, j, i*; but then he supposes that each of these series is derived from the vowel which forms the basis of it, whereas we are convinced that no mute was ever derived from a vowel, still less the original mutes *p* and *k*. He asks (1) why the dentals do not also rest upon some vowel as a basis? and (2) how we are to reconcile with the above parallelism, the obvious analogy of the row of dentals, *t, d, th, s*, to the row of gutturals, *k, g, ch, h*, and to that of the labials *p, b, f, v*; in other words, why do the gutturals possess a double support, *j* and *h*? Burnouf (*Yaçna*, p. cxiv, note 46) has attempted to remove the former difficulty by establishing from the Zend language an analogy between *a* and *h*, so that the dentals are derived from *a* through *h*, according to the following table:

<i>k</i> — <i>a</i>	<i>t</i> — <i>a</i>	<i>p</i> — <i>a</i>
<i>g</i> — <i>a</i>	<i>d</i> — <i>a</i>	<i>b</i> — <i>a</i>
<i>χ</i> — <i>a</i>	<i>θ</i> — <i>a</i>	<i>φ</i> — <i>a</i>
<i>y</i> — <i>a</i>	<i>z</i> — <i>a</i>	<i>v</i> — <i>a</i>
	<i>h</i> — <i>a</i>	
<i>i</i>	<i>a</i>	<i>u</i>

To derive *h* from *a* is somewhat difficult; it is certain, on the contrary, that the character for *a* is derived in all alphabets from that denoting a weak breathing not amounting to *h*. The vowels *i* and *u* are formed from consonants, but it is in vain to attempt the establishment of a parallelism throughout the three orders of mutes in reference to the formation of the three fundamental vowels *a, i, u*. The vowel *a* is presumed in the existence of every letter, and, as we have shown, assumes the two lighter forms of *e, o* in heavier combinations. The vowels *i, u* are of totally different origin; they are derived from the ultimate vocalization of weakened consonants. The latter results from the vocalization of *v*, the weakest form of the labial; the former is the common offspring of the dentals and gutturals, the softened dental (= *ty*) and the softened guttural (= *gy*) being equally represented by *z* or *j*, and equivalent to *sh*. The dental aspirate *th* passes at once into *s*; conversely we meet with people every day whose articulation does not admit of their pronouncing a final *s* otherwise than as *th*. This view of the connexion between *th, s, sh, y, j* is borne out in a

remarkable manner by the corresponding characters of the *Dēva-nāgarī* alphabet. That ज, the sign for *j*, was originally the same as य, *y*, is clear from झ, the older sign for *jh*: थ, *th*, differs from श, *ś*, only by the tail, which seems to be the distinguishing mark of the *s*: this tail is clearly seen in ञ, and that ष, *sh*, originally had it, may be inferred from ण, *k-sh*. The same confusion, which we have before pointed out in the gutturals, linguals, and dentals, seems to have converted into a simple *d* of the dental class the figure द, which appears from its tail to have been the assibilated *d* of the lingual class; in fact, the lower part of ण, which includes *sh*, the sibilant of the *lingual* class, is merely this same द. We have already pointed out the similarity of म and भ; there is an equally striking resemblance between ब, *b*, and व, *v*, which are similarly connected. The vowels *i* and *u* which are derived from *j* and *v*, are designated in the *Dēva-nāgarī* by derived symbols. The initials इ, *i*, and उ, *u*, are composed of the tail ॡ and the hook ॢ joined to the bar at the top by an unmeaning line of connexion (see Lepsius, *Paläographie*, p. 16). The latter is the essential part of व reversed, and the former is that tail which distinguishes the sibilants and ञ. With regard to Grimm's second question, it is to be observed that not only from the analogy of all languages, but also from a consideration of the form in Sanscrit (for ह has no frame and is turned towards the right), the aspirate must be considered of subsequent formation. In Greek it resulted from the digamma, from the gutturals, and from *s*. In Zend it is generally derivable from the sibilant. In German it mostly comes from gutturals, and we may consider it as more particularly attached to that class of consonants. As all sounds are of two primitive kinds, breathings or consonants, from a combination of which the aspirated consonants are produced, we may consider the aspirate as the final state of an aspirated consonant. In fact, consonants may be reduced to four ultimate states without becoming vowels; a dental or a guttural may become *j* (*y*) or *s* (*h*), a labial may become *v*; vocalization is effected in the former case by converting *s* into *h*, and then omitting the aspirate, or by turning *j* into *i*; in the latter, by simple conversion of *v* into *u*. When a dental or guttural is reduced to *j*, it may always become *i*; when to *s*, it may always become *h* by *visarga*;

when a labial is reduced to *v*, it may always become *u*; and when a consonant is composed of *s* and *v*, it may become indifferently either *h* or *j* (*y*) from the one element, or *u* from the other.

109 We are now prepared to discuss the various difficult points connected with the Greek alphabet, and to estimate the real value of those characters about which so much has been said. It will be found that in this as in other questions people have fruitlessly perplexed themselves with details, when a proper consideration of the principles would have disentangled all the confusion, and left no real ground for doubt or uncertainty. The pronunciation of the unaspirated mutes and liquids may fairly be presumed to be the same as that which all nations have adopted for those letters; for there is no reason whatever to suppose the contrary. The only characters which we have to consider are those representing, either in their earliest or in their subsequent state, breathings, or aspirated, or assibilated consonants. These are α , ε , ζ , $\mathcal{F}$, η , θ , ι , ξ , ν , φ , χ , ω . Of the first we have already spoken: it is simply the *Aleph* $\aleph$, or *A-karah* $\aleph$, stript of its breathing, and is therefore the fundamental vowel with which every consonant in the old syllabarium was articulated. The Greek α being pronounced with a considerable opening of the mouth, and with an approximation to the same curvature of the tongue which accompanied the articulation of δ , θ , λ , ρ , and ν , it is generally found to take or keep its place after the first four of these letters, and it habitually replaces the last in those cases where ν becomes evanescent. Similarly *u*, which is so often inserted before *l* in old French, is the only representative of that liquid in the modern spelling; thus *alter*, through *aultre*, passes into *autre* (*Varron*, p. 259). That ε and ν were originally pronounced with an aspiration is clear from their names ε $\psi\iota\lambda\acute{o}\nu$, $\tilde{\nu}$ $\psi\iota\lambda\acute{o}\nu$. The former is, as we have seen, derived from the Hebrew *He* $\aleph$, the sign of the aspirate, which, as the hardest breathing, is articulated with the lightest form of the fundamental vowel: this aspirate being omitted, the vowel becomes ε $\psi\iota\lambda\acute{o}\nu$, or the *He* without aspiration. We must consider $\tilde{\nu}$ $\psi\iota\lambda\acute{o}\nu$, which always retains its original aspirate at the beginning of a word, in connexion with $\mathcal{F}$, the most troublesome letter of the old Greek alphabet. Indeed, a full discussion of this obsolete character will exhaust nearly all that remains to be said respecting the Greek alphabet.

110 It has been shown, that, in name and form, $\mathcal{F}$, the *vau* or *digamma*, corresponds to the Hebrew *Vav*, as *H* does to *Cheth* and Θ to *Teth*. It also appears that these three Hebrew characters were originally the aspirated medials, though subsequently they approached

nearer to the *tenuēs*. The Hellenic organs of speech were, from the first, more favourable to the *tenuēs*, and it is clear that their aspirated mutes, with the exception of Θ (above, § 100), not only ultimately belonged to that order, but must be regarded as *tenuēs* with a distinct aspiration added (below, § 111). For the rough breathing, whether purely guttural or amalgamated with some other sound, the Greek ear, as distinguished from the Pelasgian, had no toleration. As the language advanced from its oldest to its most classical written state, it lost most of those aspirations which it originally possessed, and generally substituted simple for compound articulations. If we compare the Latin alphabet with the Greek, we shall see some remarkable proofs of the truth of this observation. In the Latin we have not only F with its original complex sound (§ 111), and H with its strong guttural articulation (§ 112), but J and V appear with consonantal values, as a palatal and labio-dental respectively, and Q always retains its semi-labial power, or demands the juxtaposition of *u**. In Greek, on the other hand, Φ and Ψ appear only in certain ancient inscriptions†, the mark of aspiration is converted into the symbol of a vowel, and there is hardly a single case in which *I* and *T* have retained or assumed a consonantal value. It is clear that *F* must have been originally the aspirate of the labials, namely *bh* or *hb*; but it assumed a different value, fell out of use, degenerated into a breathing, or was vocalized into *v*, and therefore φ was introduced as the proper aspirate of the labial *tenuis*.

With regard to φ or $\kappa\acute{o}\pi\pi\alpha$ it is to be remarked that when this letter appears in Greek inscriptions it is always followed by *o*. For example, we have $\lambda\upsilon\varphi\omicron\delta\omicron\rho\kappa\alpha\varsigma$ (Böckh, *C. I.* No. 166), which shows that $\kappa\acute{o}\pi\pi\alpha$ and $\kappa\acute{\alpha}\pi\pi\alpha$ were distinguished as compound and simple articulations, the former, with its accompanying *o*, being a residuum of a syllable pronounced *Kwa*, so that it was equivalent to the Latin *Qv*. The labial in the Latin *lupus*, compared with the Greek $\lambda\acute{\upsilon}\kappa\omicron\varsigma$, shows, in accordance with a principle which will be discussed below (§ 121), that these two forms must have sprung from one, which, like $\lambda\acute{\upsilon}\varphi\omicron\varsigma$, contains the elements of both articulations. The Latin form *quisquil-ia*, shows that there must have been a $\kappa\acute{o}\pi\pi\alpha$ represented by the combinations $\kappa\omicron$ and $\kappa\upsilon$ respectively, in the first two syllables of $\kappa\omicron\sigma\kappa\acute{\upsilon}\lambda\text{-}\lambda\omega$, $\kappa\omicron\text{-}\sigma\kappa\upsilon\lambda\text{-}\mu\acute{\alpha}\tau\iota\alpha$. And thus the $\delta\acute{\iota}\gamma\alpha\mu\mu\alpha$ and $\kappa\acute{o}\pi\pi\alpha$ appear to be only varieties of the same complex sound, the labial, as

* See *Varronianus*, pp. 248 sqq.

† The inscriptions in which $\kappa\acute{o}\pi\pi\alpha$ appears are the following: Böckh, *C. I.* Nos. 29, 37, 166. Those in which Φ is found are enumerated in the Appendix (A) to the present chapter.

a general rule, predominating in the former, and the guttural in the latter.

It is not our intention to tire the reader's patience with an enumeration of the various opinions which have been entertained respecting the digamma: the scholars who have written about it have for the most part been unable to avail themselves of the resources of comparative philology, by the aid of which alone we can hope to solve the problem; and therefore our knowledge of the subject has advanced but little since the point was first mooted by Bentley*. It will be far better in this place to state plainly and at once what are the results at which a comparison with the cognate languages has enabled us to arrive, results consistent not only with themselves, but also with all that the ancient writers have told us in regard to the power and functions of this letter, and with the phenomena which it presents in the Greek language.

In all the languages of the Indo-Germanic family we find in some of the most common and important words, as well at the beginning as in the middle, traces more or less distinct of a letter compounded of the two consonants, one of which represents the guttural, the other the labial, in its ultimate state. These two consonants are *s* (sometimes reduced to *h*), and *v*; and from their combination, and the different changes which they separately and together admit of, arises that great variety of letters which are etymologically traced to an original identity. In by far the greater number of cases this *sv* or *hv* represents

* This great scholar was the first to discover the traces of a lost digamma in the frequent recurrence of an hiatus in Homer. It has been made a matter of complaint by continental scholars that so little is known of Bentley's opinion about the digamma. A copy of the *Poetæ Græci*, fol. 1566, with his marginal notes, was lent to Heyne by Trinity College, Cambridge, but not the copy-book in which he had written his views on the subject more at length. This manuscript is not, as Thiersch calls it (*Gr. Gr.* § CLXII.), "a full and elaborate treatise, in which he goes through the digammated words in alphabetical order, and overthrows all apparent objections to his doctrine;" it is merely a set of rough notes, in which the words supposed to have had the digamma are enumerated, the passages in which they appear copied out, and, in some cases, the necessary emendations are suggested. But there is a total absence of order or arrangement, and it is not fit for publication. We have given, in the Appendix (B) to this Chapter, all of it that appears to be of any value or interest, as well to show how little could be done for the doctrine of the Greek alphabet without the aid of comparative philology, as to afford another proof how far Bentley was in advance of his age in this as in other points. On Bentley's Homeric studies the reader may now refer to Dr. Wordsworth's note on his *Correspondence*, p. 820. A specimen of the vague and unsatisfactory manner in which modern scholars have spoken of the digamma, may be seen in Hermann's *Opuscula*, i. p. 131, where he treats this letter as the single representative of three distinct sounds.

an union of the original guttural and labial *kp*; in those cases where a dental makes its appearance, it must be considered as having arisen, by a fault of articulation, from the sibilant. The regular series of transitions, which such a combination of the guttural and labial would present, may easily be described: the guttural may be represented by *k, q, g, j, s, h*; the labial by *p, b, v*; and these sets of letters may be permuted with one another to any extent. Then, either the one or the other may be dropt, and the remaining one vocalized into *i (y)* or *u*, according as the one retained is the guttural or labial. This process will be best shown by numerous examples. The root of the reflexive or relative pronoun (which we shall show to be the same in a future chapter) is properly *kpā* or *kvā* in all the Indo-Germanic languages. This appears as *pwȳ* in Breton, as *qvis, qvi, svus (suis)* in Latin, as *sva* in Sanscrit, as *σφε** in Greek, as *hvas* in Gothic, as *quhay* in Old Scotch, and, by a transposition of the letters, as *who* in modern English. By an omission of the labial element, this becomes *sā*, softened into *yā* or hardened into *kā* in Sanscrit; *ὄς, κος, ἔ, ἰ,* in Greek; *se* in Latin; in English *who* (when pronounced *hoo*); and in French *que* (pronounced *ke*), &c. By an omission of the guttural element it becomes in Greek *πίς, ποῦ*, &c., in German *wer*, in English *what* (pronounced *wat*), &c. Similar changes are the following; Sanscrit *çvā (çvan)*, Zend *çpan*, old Persian *çpaka*†, Russian *sabac*, Greek *κύων*, Latin, with a loss of the labial, *canis*; French, with a softening of the guttural, *chien*; German, with a substitution of the aspirate (the labial being only retained in the vowel *u*) *hund*: Latin *eqvus*, Zend *açpa*, Lithuanian *aszwa*; Æolic Greek, by assimilation to the guttural, *ἵκνος*; common Greek, by assimilation to the labial, *ἵππος*; by omission of the labial, Scandinavian *oek*; by softening the guttural, Erse *each*: Sanscrit *svādu*, Latin *suavis* (the dental being omitted as *bellum* from *duellum*); by omission of the labial and substitution

* This word alone might have sufficed to teach our Greek scholars that the digamma was occasionally something more than a mere labial breathing. In such lines as *Πηλείδης δὲ σάκος ἀπὸ Φέο* (*hvéo* or *σφεό*) *χειρὶ παχείῃ* (*Iliad*, xx. 260) it is clear that the digamma represents a double consonant. It is, however, generally true that in the Hellenism, with which alone we are acquainted, the digamma very seldom makes its appearance as a double letter, yet the guttural element is as often retained as the labial, as we may see, among other things, in the number of words originally digammated which are written with a *γ* in Hellenic. To look for the digamma in its full form we must go back to the old Pelasgian language.

† Herod. i. 110: *ὄνομα δὲ τῇ γυναικὶ ἦν τῇ συνοίῳις Κυνώ, κατὰ τὴν Ἑλλήνων γλῶσσαν κατὰ δὲ τὴν Μηδικήν, Σπακό· τὴν γὰρ κύνα καλεῖνσι σπάκα Μῆδοι*. Justin. i. 4: *Nutrici Spaco postea nomen fuit, quia canem Persæ sic vocant*. Gramm. apud Hermann. de Emend. gr. Gr. rat. p. 434: *σπάξ, ὁ κύων παρὰ Πέρσαις*.

of the aspirate for *s*, ἡδύς: Sanscrit *çvaçura*, Gothic *swaihra*, Russian *svekor*, German *schwager*, Welsh *chwegrawn*; by omission of the labial *socer*, by substitution of the aspirate ἐκυρός: Sanscrit *svapna*; by aspiration of the *s* and vocalization of the *v*, ὕπνος; by omission of the labial *somnus*: Sanscrit *svid*, Gothic *hweits*, English *sweat*; by vocalization of the labial *sudor*; by aspiration and vocalization ὕδωρ; by aspiration and omission of the labial ἰδρώς: Sanscrit *svana-s*, "a tone," Latin *sōnus* for *svonus*, Greek φωνή for σφωνή, &c. In comparing the Romance languages with the Teutonic, we find the labial *w* represented either by a combination of the guttural and vocalized labial *gu*, or by the guttural *g* only: thus from *wer*, *war*, we have *guerra*, *guerre*; from *ward*, *guardire*, *guarder*; from *warrant*, *guarantir*; from *Wilhelm*, *William*, *Guillaume*; from *wehr-wolf*, *loup-garou* = *lupus-gar-ulphus*; from *weise*, *guise*; from σφήξ, *vespa*, *wespe*, *guêpe*, &c. "The French writing," says Grimm (*Gesch. d. deutsch. Spr.* p. 296), "still retains GU before E, I, as in *guerre*, *guise*, but lets it pass over into a simple G before A, as in *garder*, *gant*. So *Galli* seems to be placed for *Gualli*, O. H. G. *Walah*. In Welsh I find the pl. *Gwalwys* 'the Gauls.' What was the sing.? The Irish substitute F for the Welsh GW, as *fion*, *gwin*, *vinum*; *fear*, *gwyrd*, *viridis*, &c." It is also remarked that Neriosengh, who translated into Sanscrit the Pehlvi version of the *Yaçna*, represents the Zend *v* by the Sanscrit *ghv* or *gv*; thus for *vôhumanô*, *hâvani*, *çâvangh* he writes, *ghvahmana*, *hâguana*, *çâguamgha* (Burnouf *apud Lepsium*, *Abhandlungen*, p. 100, Note). Similarly the old Persian name *Hystaspes*, which is probably the Greek representative of the sound *Hvīstaspes*, appears as *Gushtasp* in the more modern Persian historians, but as *Vistâçpa* in the Zend books (Burnouf, *Yaçna*, p. cvi), and *Vashtâspa* in the Behistun inscription. Rawlinson has clearly established the fact that the cuneiform letter <Y>, *u*, had an inherent power of aspiration (*Journal of the R. As. Soc.* x. 2, pp. 69 sqq.). Indeed, an examination of his alphabet will enable us to remark, that all the letters into which the elemental sign < enters, are more or less affected by aspiration; and we should be inclined to infer that whenever <Y> appears alone it is a real combination of a strong guttural with the vocalized labial, *u*; but that when it is combined with other letters the guttural alone is retained. Thus,—as Rawlinson says (p. 76) that there are numerous cases in which <Y> replaces the Sanscrit सु, *su*, and <Y>-<Y> is the substitute for स्व, *sva*,—the former ought to be expressed by 'hu and the latter by 'hva. For this reason, and because the Greek transcriptions must be allowed to furnish a certain amount of evidence,

we should write 'Hvakshatara, not 'Uwakshatara, and 'Hvaspa, not 'Uwaspa, as the Behistun forms of Κναξάρης and Χοάσπης. The following are instances of the improper substitution of dentals for combinations of this sort: the Russian *svera*, Lettish *svehrs*, old Prussian *svirs* becomes *fera* in Latin by the omission of the guttural element, unless, as Mr. Winning supposes (*Manual*, p. 83), the Latin *f* had a pronunciation approximating to this compound: in the Greek θήρ, the guttural sibilant has passed into the dental, by a false articulation such as we often hear in English, and similar to that by which σάλασσα (from ἄλς, *sal*) has become θάλασσα, &c.: this becomes the tenuis-dental in the German *thier* (pronounced *teer*), and the medial-dental in the English *deer*, Anglo-Saxon *deor*: other instances of the same corruption are furnished by τίς, τε &c., compared with κε, ποῦ, ὄς, *sa*, *qvis*; &c., and τέσσαρες compared with πένυρες, *chatur*, *quatvor*, &c. This is also the right way of accounting for such double forms as φλᾶν, θλᾶν; φλίβω, θλίβω; φλιά, θλιά; which Thiersch (*Gr. Gr.* § CLII. 9) supposes to have arisen from the union of φ and θ, on the analogy of φθήρ; this form, however, has no real existence, but is only assumed by the author of the *Etymologicum Magnum* (p. 451, 13) to be the original form of θήρ, as deduced from φθείρω, according to the second derivation which he proposes. It appears, then, that where there has been at the first a combination of two letters, one of the guttural, the other of the labial class, this compound is represented in the cognate languages by any letter which can serve as a substitute for either of the elements, or by a combination of any two of such substitutes. Now, those words, which are said to be affected with the digamma, present continual variations from the guttural to the labial and *vice versa*, and also in very many cases exhibit a combination of letters belonging to both orders. We may therefore infer conversely, that this digamma was originally a compound of the guttural and labial, presenting, however, one at least of the elements in its ultimate state, or in the nearest approach to vocalization. Comparative philology has shown us how such a combination may stand in one language for a simple labial or guttural in another, generally for a labial; and the examination of the Greek alphabet, in its relation to the Semitic, has enabled us to perceive that the Greek digamma occupied the same place as the aspirated labial ʾ in the Hebrew syllabarium. We must, then, conclude that the articulation of the Pelasgians necessitated a substitution of this compound sound for the Hebrew *vau*, just as the Sanscrit translator Neriōsengh substituted *gv* for the Zend *v*. The Persian or High German element, which prevailed over the Sclavonian in the Greek language, expelled this hard sound and the sibilants from the beginnings of words, and substituted

a simple aspirate, just as we see in the Zend language as compared with the Sanscrit, and in this way the real digamma vanished from the pronunciation of the Greek language, and was consequently omitted in the writing. The letters which most generally represent a lost digamma in Greek, are β , φ , and v from the labial class, the sibilant, aspirate, and γ from the gutturals, and the combination $\sigma\varphi$. If ι ever stood in its place it must be as a substitute for γ , as in the Prussian pronunciation of *yott* for *Gott*, &c.; and if we are to consider $\beta\acute{\alpha}\lambda\lambda\omega$, $\beta\acute{\alpha}\kappa\chi\omicron\varsigma$ as identical with $\iota\acute{\alpha}\lambda\lambda\omega$, $\iota\acute{\alpha}\kappa\chi\omicron\varsigma$ (Thiersch, § CLII. 9), the only way of explaining the transition is, by supposing that these words originally began with a digamma, or a sound composed of guttural and labial, and that β is the representative of the labial, ι of the guttural element. There are traces of such a compound sound in $\iota\alpha\kappa\chi\omicron\varsigma$, as we see from the fact, that the cognate words $\iota\acute{\alpha}\chi\omega$, $\iota\alpha\chi\acute{\eta}$, are always digammated when they appear in Homer. And with regard to $\iota\acute{\alpha}\lambda\lambda\omega$ likewise, we see traces of the labial, which in $\beta\acute{\alpha}\lambda\lambda\omega$ appears by itself, in the form $\varphi\iota\acute{\alpha}\lambda\lambda\omega$ (see Aristoph. *Vesp.* 1348; *Pax*, 434; Hesych. $\epsilon\varphi\iota\acute{\alpha}\lambda\lambda\epsilon\nu$. $\epsilon\pi\epsilon\chi\epsilon\iota\rho\eta\sigma\epsilon\nu$, $\eta\varphi\iota\acute{\alpha}\lambda\epsilon\nu$); compare also the German *qual*, *qualm*. In $\xi\acute{\alpha}\lambda\eta$ the guttural is represented by ξ , as is often the case. The vowel o occasionally stands for the labial element of the digamma, just as o has the force of w in our "one," or the French *oiseau*. Thus the name of the town Oaxus, in Crete, is spelt $\text{F}\acute{\alpha}\xi\omicron\varsigma$ on the old coins (Mionnet, Vol. II. p. 263); in Scylax, if the reading is correct, the name is written $\text{P}\acute{\alpha}\xi\omicron\varsigma$; and we find $\text{F}\alpha\nu\xi\iota\omega\nu$ in an inscription from the neighbourhood of Teos (Böckh, *Corpus Inscript.* II. p. 638). The name is said to point to the ruggedness of the place, and to be derived from $\text{F}\acute{\alpha}\gamma\nu\nu\mu\iota$ (Steph. Byz. v. $\text{O}\acute{\alpha}\xi\omicron\varsigma$ — $\tau\iota\nu\epsilon\varsigma\ \delta\epsilon\ \delta\iota\acute{\alpha}\ \tau\omicron\ \kappa\alpha\tau\alpha\gamma\acute{\eta}\nu\alpha\iota\ \tau\omicron\nu\ \tau\omicron\pi\omicron\nu\ \kappa\alpha\iota\ \kappa\omicron\eta\eta\mu\acute{\nu}\omega\delta\eta\ \upsilon\pi\acute{\alpha}\rho\chi\epsilon\iota\nu$ · $\kappa\alpha\lambda\omicron\upsilon\sigma\iota\ \gamma\grave{\alpha}\rho\ \tau\omicron\upsilon\varsigma\ \tau\omicron\iota\omicron\upsilon\tau\omicron\varsigma\ \tau\omicron\pi\omicron\upsilon\varsigma\ \acute{\alpha}\xi\omicron\upsilon\varsigma$, $\kappa\alpha\theta\acute{\alpha}\pi\epsilon\omicron\ \kappa\alpha\iota\ \eta\mu\epsilon\iota\varsigma\ \acute{\alpha}\gamma\mu\omicron\upsilon\varsigma$). So also in $\text{O}\acute{\alpha}\sigma\iota\varsigma$, $\omicron\iota\sigma\tau\omicron\varsigma$, and other words, the o must have represented the sound of w (*Varronianus*, pp. 49, 251). A question might be raised, whether the initial o in the words $\omicron\acute{\iota}\chi\omicron\varsigma$, $\omicron\acute{\iota}\nu\omicron\varsigma$, was itself a representative of the labial element of the digamma, or whether that letter was prefixed to the whole word as it stands. By comparing $\text{F}\omicron\iota\chi\omicron\varsigma$ with the Sanscrit *vêcan*, Latin *vîcus*, and $\text{F}\omicron\iota\nu\omicron\varsigma$ with the Latin *vînum*, we might infer that the o is merely a *guna* of the root-vowel in each word; and a comparison of $\omicron\iota\delta\alpha$ with the Latin *vîdi*, Sanscrit *vêda* (root *vid*); 2nd pers. sing. $\omicron\iota\sigma\theta\alpha$, Sanskrit *vettha*, Zend *vaêsta* (Burnouf, *Yaçna*, p. 451, note 315); 1st pers. plur. $\text{I}\delta\mu\epsilon\nu$, Sanscrit *vidmas*, might lead us to conclude that the diphthong in the singular is a *guna* of the root, and that the initial v , which belongs to the root, is absorbed (see Pott, *Etymol. Forsch.* I. pp. 246 foll.). On the other hand, the consonantal value of the initial o is established by the cases mentioned above;

and we find in Hesychius the glosses γοῖνος and γοῖδα. If, then, we compare these forms with the Welsh *gwyn* and *gwydd*, which has the full compound initial, and with the Armenian *gini* and the Anglo-Saxon *witan*, which have lost respectively the labial or guttural element of the prefix, we may fairly conclude that the *o* in οῖνος and οῖδα is really a residuum of the digamma. When the dental sibilant θ appears as a substitute for the digamma, it results from false articulation, as we have shown above.

111 The Latin language, in which the Slavonian element was not, as in the Greek, overpowered by the introduction of High German ingredients, retained the digamma sound to the last, though the Greek figure was not introduced until the reign of Claudius, and then again disused (Quintil. i. 7, § 26; xii. 10, § 29; comp. Tacitus, *Annal.* xi. 14). This digamma sound is attributed by the ancient writers, not to the letter F, which so nearly resembles the Greek digamma in form (the only difference in the digamma introduced by Claudius being, that it was inverted), but to the letter *u* or *v*, when used as a consonant, in which case it seems to have had the sound of our *w*, as appears from the following passages. Dionysius of Halicarnassus (i. c. xx. p. 52 *Reiske*): καὶ διδόασιν αὐτοῖς χωρία—τὰ περὶ τὴν ἱερὰν λίμνην, ἐν οἷς ἦν τὰ πολλὰ ἐλώδη, ἃ νῦν, κατὰ τὸν ἀρχαῖον τῆς διαλέκτου τρόπον, Οὐ-έλια ὀνομάζεται. σύνηδες γὰρ ἦν τοῖς ἀρχαίοις Ἑλλησι, ὥς τὰ πολλὰ, προτιθέναι τῶν ὀνομάτων, ὁπόσων αἱ ἀρχαὶ ἀπὸ φωνηέντων ἐγίνοντο, τὴν οὐ συλλαβὴν ἐνὶ στοιχείῳ γραφομένην. τοῦτο δ' ἦν ὥσπερ γάμμα διτταῖς ἐπὶ μίαν ὀρθὴν ἐπιξεγγνύμενον ταῖς πλαγίαις, ὥς Φελένη, καὶ Φάναξ, καὶ Φοῖκος καὶ Φανήρ, καὶ πολλὰ τοιαῦτα. Julian (*Orat.* xi. p. 71, edit. Spanheim): Ἐνετοὶ δὲ οἶμαι τὸ πρόσθεν ὀνομάζοντο, νῦν δὲ ἤδη, Ῥωμαίων τὰς πόλεις ἐχόντων, τὸ μὲν ἐξαρχῆς ὄνομα σώζουσι βραχεῖα προσθήκη γραμματος ἐν ἀρχῇ τῆς ἐπωνυμίας. ἔστι δὲ αὐτοῦ σύμβολον χαρακτὴρ εἰς. ὀνομάζουσι δὲ αὐτὸν ΟΥ, καὶ χρῶνται ἀντὶ τοῦ ΒΗΤΑ, πολλάκις προσπνεύσεως οἶμαι τινος ἔνεκα καὶ ἰδιότητος γλώττης. Priscian (p. 560): *Habebat autem hæc F litera hunc sonum quem nunc habet U loco consonantis posita.* Quintilian (i. 4, § 7): *Desintne aliquæ nobis necessariae literæ—ut in his, SERUUS et UULGUS, Æolicum digamma desideratur.* (xii. 10, § 29): *ÆOLICÆ quoque literæ qua SERUUM, CERUUM—que dicimus, etiamsi forma a nobis repudiata est, vis tamen nos ipsa persequitur.* From these passages we see that the later writers considered the digamma only in its labial element. It appears, however, from Quintilian, that there was another Latin letter, F, which represented the digamma in form and name, which occupied the same place in the Roman alphabet, and which corresponded to the older power of the Greek di-

gamma, in combining, as it would seem, a sibilant with the labial. Quintilian says (I. 4, § 14), that *fordeum* and *fædus* were written instead of *hordeum* and *hædus* in old Latin: *quin FORDEUM, FÆDUSQUE (dicebant), pro aspiratione VAV velut simili litera utentes: nam contra Græci aspirare solent (Φ), ut pro Fundanio Cicero testem, qui primam ejus litteram dicere non posset, irridet.* Again he says (XII. 10, § 27, 29), that it was a great disadvantage to the Romans to have only V and F instead of the Greek *Τ* and *Φ*, *quibus nullæ apud eos (Græcos) dulcius spirant.* — *Nam et illa, quæ est sexta nostrarum, pæne non humana voce, vel omnino non voce potius, inter discrimina dentium efflanda est: quæ etiam cum vocalem proxima accessit quassa quodammodo, utique quoties aliquam consonantem frangit, ut in hoc ipso FRANGIT, multo fit horridior.* From these passages Mr. Winning has inferred, as we have already mentioned, that the Latin *f* corresponded to the Lithuanian or Sclavonian double consonant *sv* or *zw*. He is also inclined to suppose that two distinct sounds were represented by the Latin *f*; one corresponded to the Greek *φ*, and was used in words connected with the Greek, such as *fero*, *fama*, &c.: the other, this double sound, appears only in words to which the Greeks have no corresponding forms, as in *fariolus*, *fasena*, &c., in which the *f* was subsequently changed to *h* (*Manual*, p. 266). We are willing to adopt the former opinion, that *f* was, at least originally, a double sound, consisting of a sibilant and a labial: from the manner in which Quintilian speaks of it, there must have been something very peculiar about the Latin *f*, and the description which he gives of its pronunciation would of itself lead us to suppose a sort of sibilation. But we are sure that it never approximated to the Greek *φ*; Quintilian most expressly tells us so, and the fact is clear from the following phenomena which are applicable to words connected with the Greek, as well as to the other words in which *f* appears. That the Greek *φ* is a distinct *ph*, as in *shepherd*, and that it is not equivalent in sound to the Sanscrit *bh*, which, as well as the Latin *f*, etymologically corresponds to it (compare the Greek and Latin roots *φv*, *fu*, with the Sanscrit equivalent *bhû*), appears from reduplications like *πέφνκα*, and from contacts like *Σαπφώ*. That the Latin *v* and *f* are cognate sounds, and have nothing in common with the Latin *b*, *p*, or with the Greek *β*, *π*, *φ*, is clear from the fact that *v* and *f* may be immediately preceded by *n*; which is always changed into *m* before the other letters: compare *conferre*, *conviua*, with *combibere*, *componere*, *imprimis*, *ἐμβάλλειν*, *ἐμπας*, *ἀμφί* (Pott, *Etymol. Forsch.* I. p. 79). In our opinion, the letters *f* and *v* in Latin corresponded, in the time of Quintilian, to *hv* and *w* respectively; at all events, the former was an originally compound sound made up of a guttural (whether under the

form of a sibilant or an aspirate) and a labial; for we hold that no labial can pass directly into a guttural, but that, in every instance where this has apparently occurred, the labial has been originally connected with a guttural: thus *fircus* must have been *hwirquus* or *svirquus* (Sanskrit *vṛikas*, Zend *vehrkas*) before it could become *hircus* or *hirpus*; and we think that the change of a permanent *f*, at the beginning of Latin words, into *h* in the Romance languages, is a proof, that, to the last, *f* contained some guttural element; thus the Norman *hawk* stands for *falco*; *hors*, in French, represents the Latin *foris*, which is *fuori* in modern Italian (compare *guerra* and *guerre*); and the Spanish *hacer*, *hambre*, *hado*, *higo*, *hijo*, *hilo*, *hermoso*, *humo*, *hoja*, *hongo*, *huesa* (*hvesa*), *hurto*, are the modern substitutes for the Latin *facere*, *fames*, *fatum*, *ficus*, *filius*, *filum*, *formosus*, *fumus*, *folium*, *fungus*, *fossa*, *furtum*. Grimm, we are aware, thinks that there is a real connexion between the labial *v* and the sibilant and aspirate *s*, *h*. "I infer," says he (*Deutsche Gramm.* I. p. 581), "the intimate connexion of the three breathings *v*, *h*, *s*, partly from the change of *ei* into *ê* (p. 91), of *au* into *ô* (p. 94), which takes place before them, partly from the interchange of *h* and *v*, *w* (pp. 148, 403), *h* and *s* (pp. 318, 416), and the contact of the aspiration with the assibilation (*th*, *ts*, *z*); between *v*, *w*, and *s*, there is no immediate interchange; *h* and *v*, the softest of all consonants, occasionally fall off without substitution, even when they stand at the beginning, and especially before liquids." It is strange that this great philologist should not have perceived that the arguments which he has drawn from the vocalization of the German languages, rather prove the original union of a guttural and labial in *v*, *h*, *s*, than the identity of the guttural and labial elements: the change of *ei* into *ê* = *ee* before *v*, *h*, *s*, is an absorption of *i*, the guttural element of the diphthong, into the following guttural element *h*, *s*, or into the guttural element combined with and presumed in the *v*; and it is for this reason that the guttural part of the *w* is often dropt in this case, the change of the diphthong remaining as a trace of the guttural part of the compound sound: conversely, the change of *au* into *ô* = *oo* before the same letters, shows a corresponding loss of the labial in *h*, *s*, the guttural part being alone retained. Grimm admits that there is no immediate interchange between the *v* (*w*) and *s*, and that *v* and *h* (which is only a further reduction of *s*) sometimes fall off without leaving any traces: this is a proof that a compound like *hv* = *sv* might become either *h*, *s*, or *v*, not that these letters are themselves identical. The fact is, as we have before mentioned, that Grimm has not a proper notion of the origin and value of the vowels

i, *u*, which, we have shown, are the vocalization of *j* and *v*, the ultimate forms of the mutes, the former being the point of convergence to the gutturals and dentals, the latter to the labials. The name *ἰ ψιλόν*, and the fact that this letter never appears at the beginning of a word without a rough breathing, show how natural the union of the aspirate and labial are to some articulations; this vowel is to the present day pronounced like *v* by the Greeks even before consonants; and the analogy of the Sanscrit language, in which *i* and *u* are always pronounced as the consonants *y*, *v* before vowels, even when they form part of the diphthongs *ê*, *ô*, as well as the testimony of the old Grammarians, assures us that the Greek *υ* was *v*, or rather *hv*, before it was *u*, and that *ι* was *y* or *j* before it was *i*.

112 We may now leave the digamma, or rather its labial element, and direct our attention to the sibilants, the aspirate, the guttural *χ*, and the vowel *ι* considered as the ultimate state of the gutturals and dentals. The gutturals are softened as follow—*k* into *ch*, *sh*, *s*; *g* into *j*, *sh*: the dentals thus—*t* into *th*, *sh*, *s*; *d* into *sh*. These changes may also be produced by subjoining to each guttural and dental the letter *y*(*i*), and pronouncing the combined letters as one: the sound which results in each case is *sh*. As, then, this softening might have been effected by the addition of *i*, if that vowel had existed, conversely the vowel *i*, not having existed previously, naturally sprung from this change of the aspirates of the dental and guttural orders, the aspirated dental or guttural element being omitted; just as the vowel *u* arose from a similar softening of the aspirate of the labial order, the aspirated labial element being omitted. The Greek *ξ* remains as a representative of the guttural or dental combined with *i*(*y*), as will hereafter be shown*. In the mean time it is sufficient to state that it appears, from the forms of the comparative† and of the verb conjugation‡, and from other phenomena in Greek§, that *ξ* was equivalent to *xy*, *γy*, *ty*, *dy*: we know from the analogy of modern languages that these sounds may be equivalent to *sh*, and it is clear

* The theory, which we started in this work twenty years ago, respecting the influence of *i* on a preceding consonant, has been made the subject of a special investigation by A. Schleicher (*zur vergleichenden Sprachengeschichte*, Bonn, 1848). He gives this phenomenon the name *Zetacismus*, with the following explanation (p.39): "I derived this name from the most familiar example of the amalgamation of two consonants of which the second is *j*. In the narrower sense then it denotes the complete amalgamation of *j* with the preceding consonant (as in the Greek), in the wider sense, it signifies any influence of a contiguous *j* (or of the vowels *i*, *e*), on the preceding consonant."

† Book II. chap. 2

‡ Book IV. chap. 4.

§ Book III. chap. 1.

from the words of Dionysius of Halicarnassus (*de Compos.* c. 14, p. 81, Reiske) that ζ must have been sometimes pronounced like *sh=dy=gy*. He says: τριῶν δὲ τῶν ἄλλων γραμμάτων, ἃ δὴ διπλᾷ καλεῖται, τὸ ζ μᾶλλον ἡδύνει τὴν ἀκοήν τῶν ἐτέρων. τὸ μὲν γὰρ ξ, διὰ τοῦ κ, τὸ δὲ ψ, διὰ τοῦ π, τὸν συριγμὸν ἀποδίδωσι, φιλῶν ὄντων ἀμφοτέρων. τοῦτο δ' ἡσυχῇ τῷ πνεύματι δασύνεται, καὶ ἔστι τῶν ὁμογενῶν γενναϊότατον. In the Doric dialect*, ζ is written σδ, which is merely a result of Hellenic euphony; for the place of ζ in the alphabet shows that it must have been considered originally as a modification of δ; and as ξ represents both κσ and σκ, so there is reason to think that σδ is a transposition of an original δσ†, which corresponds to the Hebrew *Tsade*, and also indicates a sound nearly connected with δι, γι or ξ=j. Conversely, in the East-Anglian dialect of our own language, *ds* becomes *dge=j*, as is shown by the Suffolk proper names *Etheredge*, *Cocksedge*, &c., which represent the original genitives *Ethereds*, *Cocksheads*, &c. The vowel ι is placed next to ϑ, the simple aspirate of τ or δ, because it is the last result of the softening of those letters. In some cases a Greek ϑ represents a Sanscrit γ, as in χθές, *hyas*.

When the Greek ζ stands as a representative of the guttural in its softened state (thus, ζάω corresponds to the Sanscrit *jivāmi*, Slavonic *schivŭ*, Lithuanian *gyws=vivus*, *gywenŭ=vivo*‡, and ξέφα to the Sanscrit *java*, Lith. *jawai*§), it is equivalent to the Zend *z*, which was nearly our *j*, as appears from the circumstance that Neriosengh uses the Sanscrit *j* as a transcription of this letter: thus he writes *Ahuramajdasya*, "of Ormuzd," and *Ijisnijaṇḍa*, "the *Zend*, or book called *Yaṣna*," *Majdaīasnyah*, "the *Mazdaīasnas*" (Burnouf, *Yaṣna*, p. xv). In related words this Zend letter stands for the Greek κ, γ, or χ, or for a Latin and Sanscrit *h* when that letter represents a strong guttural breathing: the following instances are given by Burnouf (*Yaṣna*, p. lxxxi):

* So say the Grammarians (*Scholl. Dion. Thr.* 780, 16; *Etym. M.* 412, &c.); but Ahrens (*de dialect. Dorica*, p. 95) considers this as an occasional imitation of the Lesbian dialect by the lyric and bucolic poets.

† A curious metathesis of *tv* into *pt* has been noticed in the Buddhist inscription of Girnar. See Lassen, *Indische Alterthumskunde*, II. p. 227, note 4.

‡ Bopp has not seen the true analysis of this root, although he has furnished the materials for it (*Vergl. Gramm.* p. 128). A comparison of the Gothic *quivs=vivus*, with the O. N. *quikr*, O. S. *quic*, Engl. *quick*, and the perfect *vixi* (Schneider, *Elementarlehre*, I. p. 243), shows that the root originally involved a reduplication of the digamma or *qv*: so that the Latin *vivus* stands for *qvivvus* (*Varronian.* p. 250).

§ According to Ptolemy *Java* was "the barley island;" VII. 2: Ἰαβαδίου δὲ σημαίνει κριθῆς νῆσος. See W. Humboldt, *über die Kawi-Sprache*, I. pp. 60–63; A. Humboldt, *Kosmos*, I. p. 559 note.

Sanscrit.			Greek.	Zend.	Lith.
<i>mih</i>	Latin,	<i>mingo</i>	ὀμίχῳ	<i>miz</i>	<i>myzu</i>
<i>hima</i>		<i>hiems</i>	χείμα	<i>zyáo</i>	<i>ziema</i>
<i>hañsa</i>	{ Gothic,	<i>gans</i>	χῆν		<i>zasis</i>
	{ Latin,	<i>anser</i>			
<i>b-hûmi</i>	{ Latin,	<i>humus</i>	χαμαί	<i>zēm</i>	<i>zeme</i>
	{ Gothic,	<i>gauñ</i>			
<i>hṛdaya</i>	{ Latin,	<i>cor</i>	καρδία		<i>szirdis</i>
	{ Gothic,	<i>hairtô</i>			
<i>aham</i>	{ Latin,	<i>ego</i>	ἐγώ	<i>azem</i>	<i>isz</i>
	{ Gothic,	<i>ik</i>			
<i>hasta</i>	{ —	<i>hand</i>	χεῖρ	<i>zasta</i>	
	{ Latin,	<i>hir</i>			
	{ —	<i>pre-hend-ere</i>			
<i>mahat</i>	{ —	<i>magnus</i>	μέγας	<i>maz</i>	
	{ Gothic,	<i>mikels</i>			
<i>hari</i>	Latin	<i>viridis</i>	ὠχρός	<i>zairi</i>	

113 The reader will be careful to distinguish from this appearance of the *h* in Sanscrit and Latin those cases in which the initial aspiration appears in Greek as the representative of a sibilant in those languages. We have already shown, from the form of the character in the *Dêva-nâgarî* alphabet, that *h* is not an original letter. It has, however, two sounds. According to one it is a hard guttural breathing, and appears as the representative either of an original guttural consonant or of the digamma. In this use it may stand either at the beginning or in the middle of a word in Latin, Sanscrit, or Low German, and it frequently resumes its original form in certain combinations. It is this *h* which corresponds to the Zend *z=j*. To the instances given above we may add the following: Sanscrit root *vah*, Latin *veh-it*, *vec-sit*, *vectus*, *vac-ca*, *Φόχ-ος*, *Φοχέειν*, *ἀνχ-ήν*, Zend *vaz-aiti*, Slavonian *vezeti*, Lithuanian *vezu*, *vessti*; Latin *trah-ere*, *trac-si*, German *trag-en*, Lithuanian *traukti*; Latin *hostis* from *foſtis* (= *svostis* or *hvostis*), German *gosts*; Gothic *haupit*, Latin *caput*, *κεφαλή*; Latin *homin* (*homo*), Gothic *guma*, old High German *komo*, Lithuanian *zmones*, old Prussian *smunents*; Latin *hortus*, Gothic *gards*, old High German *karti*, *χόρτος*; Gothic *taihun*, *δέξα*, Sanskrit *daça*, &c. From this it is clear that the strong *h* is the immediate representative of the digamma or of a primitive guttural; that it is harder and more original than *j=z* (Zend) appears from the use of the latter in reduplications from roots beginning with the hard *h*, as in *jahâmi*, *juhâva*, &c.; compare *chakâra*, *bibharmi*, &c. The other sound of *h* is merely a weakening of the sibilant, similar to the *visarga* at the end

of a word, and generally makes its appearance as an initial. This breathing, as a substitute for *s*, is consistently found in those languages of the Indo-Germanic family, which we infer from other reasons to be more recent than those of the same family in which the corresponding words begin with *s*: its appearance may, therefore, be used as an argument to prove that languages, of which we do not know the age from other sources, are recent in comparison with those which present the initial *s*. We have *h* for *s* in Greek as compared with Latin and Sanscrit, in Welsh as compared with Erse, and in Zend as compared with Sanscrit: now we have reason to believe, independently of this, that Greek (in one element at least) and Welsh are younger than Latin or Sanscrit and Erse respectively: we therefore conclude that Zend is younger than Sanscrit, or belongs, at least in one element, to the High Iranian class*. The following are a few instances out of a great number which might be collected.

More ancient languages with <i>s</i> .			More recent languages with <i>h</i> .		
Sanscrit.	Latin or Gothic.	Erse.	Zend.	Greek.	Welsh.
<i>sâ</i>	<i>sî</i>	<i>si</i>	<i>hâ</i>	<i>ῥ</i>	<i>hi</i>
<i>saptan</i>	{ <i>sibun</i> <i>septem</i> }	<i>secht</i>	<i>hapta</i>	<i>ἑπτά</i>	
{ <i>sam</i> <i>sakrt</i> }	<i>simul</i>		{ <i>ham</i> <i>hakērēt</i> }	<i>ἄμα</i>	<i>evo</i>
	<i>sal</i>	<i>salan</i>		<i>ἄλς</i>	<i>halen</i>
<i>svapnas</i>	{ <i>somnus</i> <i>slêps</i> }	<i>suan</i>		<i>ὑπνος</i>	<i>hyn</i>
<i>svar</i>	<i>sol</i>	{ <i>saul</i> <i>sornean</i> }	<i>hvarē</i>	(<i>ῥῆλιος</i>)	{ <i>heol</i> <i>hinon</i> }
<i>santi</i>	{ <i>sunt</i> <i>sint</i> }		<i>henti</i>		
<i>Sarasvati</i>			<i>Haraqaiti</i> (i. e. <i>Arachosia</i>)		
<i>Sarayu</i>			<i>Harohu</i> (i. e. <i>Herat</i>)		
<i>Sindu</i>			<i>Hindu</i>		
<i>soma</i>			<i>homa</i>		
<i>Asura</i>			<i>Ahura</i>		

* Schleicher remarks (*zur vergl. Sprachengesch.* p. 34): "the Zend, which is so rich in vowels and changes the dental sibilant into a breathing, exhibits a strong resemblance to the Greek in this and other particulars, whereas the more ancient Latin shows rather the *habitus* of the old Indian." It is perhaps unnecessary to remind the reader that this is another proof of the affinities of the ancient Greeks and Persians (above, § 90).

114 In general it is to be remarked that the letters ν and ς , which are of more frequent occurrence than any other consonants at the end of words, are peculiarly liable to become evanescent not only at the end of a word, but also at the beginning or end of any syllable. This is an extension of the principle of *anuscâra* and *visarga*, and some of the most remarkable phenomena of Greek etymology are explicable only with reference to this tendency. The evanescence of σ , or its subsidence into an aspirate at the commencement of a word, has been sufficiently exemplified above. It may be considered as almost a rule of the Greek language when a vowel follows. Thus, the *s* of *silva* is always represented by the aspirate of ὕλῃ, except in the old compound Σκαπτη-σύλη = *Wald-gerode*, the name of a place in Thrace (cf. *Sila* in Bruttium). Σύς is found by the side of ὕς, and θ sometimes stands for σ by the side of the aspirate, as in θάλασσα for σάλασσα by the side of ἄλς; θέλω, from the root ἔλ-; &c. We have Sarpedon, “the robber” = ἄρπηδών (Welcker, *Kret. Kol.* p. 9; Rückert, *Troja's Ursprung*, p. 34). The Greek Ἐρρινύς, Ἐρρινεός have been compared with the Sanscrit *Saranyû*, *Sâranyava* (Kuhn, *Zeitschr. f. vergl. Sprachf.* I. pp. 439 sqq.). Similarly, the Greek Ἐρμῆς, Ἐρμείας, and the Tuscan *Turms*, are equally connected with the Sanskrit *Sârameya* (Dr. Trithen, *Proc. Phil. Soc.* III. No. 71, pp. 201 sqq.): compare ἡμέρα, σήμερον, τήμερον; ἑπτὰ, τεπτὰ; ἑρμῆς, τερμῆς, &c. (Varronianus, p. 150). The medial δ appears also as an occasional representative of the sibilant; compare δείλη with εἴλη, σέλ-ας, ἥλιος, &c. The absolute and total evanescence of ς and ν is most conspicuous in the cases in which they were originally flanked on both sides by short vowels. They are then changed into the rough or nasal breathing respectively, and thus they pass off from the want of characters to express them. Compare τύπη, τύπται, with τίθεσθαι, and μείζους, μείζοες, with μείζονες. The simple α , which the Hebrew grammarians appropriately call *patha*^h or “opening,” seems to have been peculiarly fitted to serve as the vehicle of the residuary nasal breathing. Thus when ν is followed by τ , θ , or stands by itself at the end of a word, it is very often represented by α^* . Hence we have τετύφται for τετύφνται, σωζοίατο for σώζοντο, πάτερα for πάτερν, or πάτρην, &c. The plural ἐχόμεθα by the side of the dual ἐχόμεθον, Æol. ἐχόμεθεν, is an instance of the frequency of this interchange, and some roots are regularly affected by it; compare βένθος with βάθος; πένθος with πάθος, πείσομαι, on the analogy of χαρίεις from χαρίεντις, for

* On the evanescence of ν in particular we have collected a number of illustrations in a special paper. *Trans. of the Philological Society* for 1854, pp. 282—295.

πένθ-σομαι; πέπονθα as the perfect of πάσχω for πένθσκω; γέγονα by the side of γέγραα; the roots μα- and μεν-, &c. A similar principle, namely the affinity of the aspirate and sibilant, will explain a remarkable phenomenon in regard to the vanishing letter, σ. Although the Greeks particularly delighted in the combination σθ-, which is partly shown by the purely Hellenic change of the more ancient ξ=δσ into σδ; and though there are many structures, as we shall see in the course of the following pages, which are really due to this predilection, yet we find on the other hand some cases in which the σ of the combination σθ becomes absolutely evanescent when it is preceded by an aspirate; thus, we have τέτυφ-θε for τέτυφ-σθε, λέλεχ-θαι for λελέχ-σθαι, &c. If the combination ντ is left at the end of a word it regularly becomes α. All neuter plurals are examples of this, and we shall see below that δέξα must have been originally δφε-κεντ. The loss of the ν is very common in the separative particle ἀνά or ἀν-, signifying remoteness in space or time, and used with nouns as a negative prefix, and with verbs as a temporal augment. In the former case ἀνα or να always becomes ᾶ- in Attic Greek when prefixed to a word beginning with a consonant. When it precedes a word beginning with a vowel the ν is retained, and the form is ἀν'- or ἀνη-. In Homeric Greek the form νη- appears whether the word begins with a vowel or a consonant. In the other case referred to—that of the temporal augment—ἀνα is invariably softened into ἔ-. There is a curious analogy in this case to the Hebrew הָנִי, 'hānī, which is always curtailed into הֵ, 'he, when it appears as the personal prefix of the continuous tense: and in the same way הֵנֶשֶׁח, 'hēnesh, "a man," is usually shortened into הִישֵׁח, 'hish, and the n is omitted in הָפַח, 'haph, from הֵנֶפֶח, 'heneph, just as in ἄνω by the side of ἄνεμος and *animus*.

115 The letter ξ, which is generally a direct union of the guttural x or γ with the sibilant, does not require much notice. In Sanscrit it is often represented by the softer form sh, just as x is almost consistently represented by ç. The explanation of this is not difficult. We shall show immediately that, when an aspirate or sibilant is combined with a consonant, it very often changes its place, that is, it may stand either before or after the consonant. Thus the root of the relative pronoun, which is sv in Sanscrit and Greek, is qv in Latin, hv in Gothic, but wh in English; so q=hr becomes rh in Latin; and we have already seen that ξ was both δσ and σδ. Similarly ξ was both xç and σx, just as the sound, which is hs in Gothic, became sh in Sanskrit, so that ξ occasionally corresponded in power to the Semitic Shin, the name of which its common denomination ξῖ seems to repre-

sent. Thus *ξίφος* was written *σίφος* (Hesych. s. v.), and perhaps even *κίφος* (Pausan. iii. 26, 9); and in the same way the Eastern subjects of Alexander seem to have transposed the elements of the *ξ* in his name, if we may judge from the forms of *Ἀλέξανδρος* and *Ἀλεξανδρία*, e. g. *Iscander*, *Scanderon*, *Candahar**. The same has been the case with *ψ* (*Bekk. Anecd.* p. 815), and the pronominal forms *ψε*, *ψιν*, -*pse*, must be considered as transpositions of *σφε*. It has been mentioned above, that *ξι* appears to have come in as a substitute for the Doric *σάν*, the older representative of *Shin*. The Latin *x* seems frequently to have lost the *k*-sound altogether, as in *Ulyxes* compared with *Ὀδυσσεύς*, *rixā* compared with *ῥιθ-ς*, *ῥιζω*, &c. In the Doric dialect *ξ* appears for *σ* in the fut. and 1 aor. of verbs in -*ξω* (Ahrens, *dial. Dor.* pp. 89 sqq.). It can hardly be doubted that it is here, like *σσ*-, a representative of the the sound *sh* resulting from *σι*. In the name *Ξέρξης* it seems that *ξ* represents both *ks* and also *sk* softened into *sh*, for the Persian original was *Khshayārsha* (see below, §§ 160, 470).

116 We must now show how *H*, the old mark of the aspiration in Greek, came to be used as a sign for the long *e*, the first half of it being alone retained to denote the rough breathing. It is an etymological principle of great importance, that an aspirated short vowel is equivalent to an unaspirated long one. To this may be added another principle of equal importance and fundamentally the same, that an initial digamma or aspirated labial, represented by the secondary vowels *i* or *u*, may be placed behind the initial vowel so as to form a diphthong, or even be transferred to the second syllable of the word. We have a simple exemplification of the first principle in the word *ῥῶμος* "a shoulder," which is clearly another form of *ῥῶμος* from the pronominal compound *ῥο-μ-* (*ῥομῶν*, &c.), expressing the equilibrium of the shoulders: so that *ῥῶμος*=*ῥῶμος* is related to *humerus*, as *νόμος* is to *numerus*. Of both principles we have the following instances in the Greek language itself, and from one root—*ἔλκ* in *ἔλκω*, which begins properly with the digamma, and of which we shall speak more at length in a subsequent chapter. From this root we have *ἤλεκτρον* for *ἔλεκτρον*, *ἡλακάτα* and *ἡλακάτη* for *ἐλκτά* and *ἐλκτή*, and *ῥῶλαξ* for *ῥῶλξ* according to the first principle, and *αὔλαξ* for the same word, according to the second†. We recognise the same etymological fact in the comparison of *ae-quus* with *ἑ-κα-νός*, which has nearly the same meaning. In compounds we see

* In the inscription of Açoka at Kapur di Giri (B. C. 253), the name of Alexander seems to be represented by *Alikasunari*, in which the elements of the *ξ* appear in their proper order.

† See Buttman, *Mythol.* ii. pp. 355 foll., which we have translated in our notes on the *Antigone* of Sophocles, pp. 213–219.

that *ae*, originally *ai*, is equivalent to $\bar{i}$. Thus from *æs-timo* we have *ex-istimo*, from *æ-quus*, *in-iquus*, &c. (see *Varronianus*, p. 262). Consequently *æ-quu-nus* = $\bar{i}$ -*ka-nus* = $\bar{i}$ -*κα-νός*. So that we ought not to connect *ικανός* with *ἴκω*, *ἰκάνω* as Passow does in his *Lexicon*, but with the pronominal compound *hi-c* found in the affix *-i-κός*, &c.: and thus *ικα-νός* corresponds in origin as well as meaning to *idoneus* = *ideo-neus* (cf. *Buttmann*, *Lexil.* i. 46; *Döderlein*, *Etym. u. Syn.* iii. 276). The second principle is very frequently applied in transitions from Greek to Sanskrit: thus we have in Sanscrit *dēvas* = $\theta\epsilon\phi\acute{o}s$ (*dhēvos*); *ēkataras* (*aikataras*) = $\epsilon\acute{\kappa}\acute{\alpha}\tau\epsilon\rho\omicron\varsigma$; the Sanscrit *ēka* = *aika* is *yak* in modern Persian, and the Sanscrit *vēdmi* (= *vaidmi*), *phēna* (= *phaina*), *gvēta* (= *gvaita*) correspond to the Slavonic *vjemi*, *pjena*, *svjet*. But it is not at all uncommon in Greek: thus from the last-mentioned root ($\epsilon\acute{\kappa}\alpha\varsigma$, Sanscrit *ēkas*, Latin *æquus* and *secus*), we have $\epsilon\acute{\upsilon}\kappa\eta\lambda\omicron\varsigma$ for $\epsilon\acute{\kappa}\eta\lambda\omicron\varsigma$, a change which it is certainly not necessary to account for by the supposition of two digammas, as Thiersch and *Buttmann* have supposed. The gloss in *Hesychius* ($\gamma\acute{\epsilon}\gamma\kappa\alpha\lambda\omicron\nu$, $\eta\sigma\upsilon\chi\omicron\nu$), which would seem to point to a form $\phi\acute{\epsilon}\phi\kappa\alpha\lambda\omicron\varsigma$, is evidently wrong from its position between $\gamma\epsilon\acute{\iota}\omega\rho\alpha\varsigma$ and $\gamma\epsilon\kappa\alpha\theta\acute{\alpha}$ (l. $\gamma\epsilon\kappa\omicron\upsilon\sigma\alpha$) in that vocabulary: we should read $\gamma\acute{\epsilon}\kappa\alpha\lambda\omicron\nu$ with *Pearson* and *Guyet*. Sometimes the digamma, which should have begun the word, was transferred not only to a place behind the first vowel, but even to the beginning of the second syllable, as in the following instance: $\acute{o}\lambda\omicron\varsigma$ = $\phi\acute{o}\lambda\omicron\varsigma$, “full,” became first $\omicron\upsilon\lambda\acute{o}\varsigma$ = $\acute{o}\phi\lambda\omicron\varsigma$, then $\acute{o}\lambda\phi\omicron\varsigma$, as we see in $\acute{o}\lambda\beta\omicron\varsigma$ and $\acute{o}\lambda\beta\alpha\chi\acute{\eta}\omicron\nu$ (as it should be read in *Hesychius*, s. v. $\epsilon\acute{\upsilon}\phi\lambda\omicron\upsilon\tau\omicron\nu$) from $\omicron\upsilon\lambda\acute{\eta}$ and $\chi\acute{\epsilon}\omega$. The same principle explains the shifting of the aspirate in such cases as $\epsilon\acute{\chi}\omega$ (*ek-ho*), $\epsilon\acute{\xi}\omega$ (*hek-so*), $\tau\rho\acute{\epsilon}\chi\omega$ (*trek-ho*), $\theta\rho\acute{\epsilon}\xi\omega$ (*threk-so*), &c. We conceive then that the adoption of *H* as the sign for the long vowel $\eta = \bar{e}$, is due to the fact that $h\bar{e}$ was actually considered as equivalent to $\bar{e}$. The vowel η really contains, in many cases, not merely the common rough breathing, but also the digamma *hv*, and even the softened dental or guttural *dy*, *j*, as in $\epsilon\tau\acute{\upsilon}\pi\eta\nu$ for $\epsilon\tau\acute{\upsilon}\pi\eta\nu$, or, when aspirated at the beginning of the word, as in $\eta\mu\epsilon\rho\varsigma$ for $\delta\acute{\iota}\alpha\mu\epsilon\rho\varsigma$, &c. This *j* or *y* is also represented by ϵ in the middle of a word, as in $\pi\acute{o}\lambda\epsilon\omega\varsigma$ = $\pi\acute{o}\lambda\gamma\omega\varsigma$; and we often find that $\bar{e}\bar{e}$ presumes a single ϵ preceded by some guttural breathing (*Buttmann*, *Ausführl. Sprl.* § 112, 17, *Anm.* 23). Compare $\epsilon\acute{\epsilon}\rho\sigma\eta$ with the Sanscrit *varsha*. We shall not be surprised, therefore, to find that η is also in many cases the representative of $\bar{e}\bar{e}$: thus $\delta\acute{\epsilon}\epsilon\lambda\omicron\varsigma$ is another form of $\delta\eta\lambda\omicron\varsigma$ and $\eta\delta\epsilon\epsilon$, of $\eta\delta\eta$;— $\alpha\acute{\nu}\alpha\lambda\acute{\upsilon}\tau\epsilon\alpha\iota$ $\gamma\omicron\upsilon\iota\nu$ $\tau\acute{o}$ η $\epsilon\acute{\iota}\varsigma$ $\delta\acute{\upsilon}\omicron$ $\bar{e}\bar{e}$, $\acute{\omega}\varsigma$ $\pi\alpha\rho\acute{\alpha}$ $\tau\acute{\omega}$ $\pi\omicron\iota\eta\tau\eta$ — $\delta\acute{\epsilon}\epsilon\lambda\omicron\nu$ δ' $\epsilon\pi\acute{\iota}$ $\sigma\eta\mu\acute{\alpha}$ τ' $\epsilon\chi\epsilon\nu\alpha\nu$ — $\kappa\alpha\acute{\iota}$ $\sigma\upsilon\nu\alpha\iota\rho\epsilon\acute{\iota}\tau\alpha\iota$ $\pi\acute{\alpha}\lambda\iota\nu$ $\tau\acute{\alpha}$ $\delta\acute{\upsilon}\omicron$ $\bar{e}\bar{e}$ $\epsilon\acute{\iota}\varsigma$ $\tau\acute{o}$ η , $\acute{\omega}\varsigma$ $\tau\acute{o}$ $\eta\delta\epsilon\epsilon$, $\eta\delta\eta$ (*Schol. Dionys. Thr.* p. 797). The form of ω shows that it is a similar combination of oo , and there is every reason to believe

that this was its real value. As the Sanscrit $\acute{a}=a+\alpha$ regularly corresponds to ω as well as to $\bar{a}$, and as the Sanscrit $\check{a}$ represents the lighter δ no less than the heavier $\check{a}$, we may fairly conclude that ω is the reduplication of o just as $\bar{a}$ is of $\check{a}$, or that in the longer as well as in the shorter vowels the Greek alphabet denotes those differences of weight, which the Sanscrit neglects. In this scale of weights ϵ is the lightest vowel. But η is heavier than ω , which is substituted for it in derivative forms or heavier words; thus from $\pi\alpha\tau\acute{\eta}\rho$ we have $\acute{\alpha}\pi\acute{\alpha}\tau\omega\rho$, from $\phi\rho\acute{\eta}\nu$, $\sigma\acute{\omega}\phi\rho\omega\nu$; and we have the heavier words Ἰταλιώτης , στρατιώτης by the side of πολιτής . The statement, therefore, that $\eta=\epsilon\epsilon$, requires the explanation given above, namely that $\epsilon\epsilon$ in this case must be regarded as a fainter articulation of the $\iota\alpha$ to which η is etymologically equivalent. The pronunciation of η takes it out of the category of the mere articulation vowels α , ϵ , o . It corresponded to the Hebrew *tsere*, i. e. to our long a as in *mate*, or to our long e as in *there*. The passage from $\iota\alpha$ to this sound may be seen in a comparison of the German *ja* with our *yea*. The act of utterance in o , ω , no less than in α , $\bar{a}$, ϵ , is consistent with a fully-opened mouth, and this is indicated by the Hebrew names *patha^h*, *qametz*, and *holem*, and by the relation between o and the nasal $\var�$; while the narrower opening and the formation of the lips into a mere fissure, by which the *tsere* and the cognate or included *hirik* are articulated, are sufficiently expressed by these names. This difference is recognised by the Greek grammarians, who give the following description of the sound of η : $\delta\epsilon\iota\ \tau\acute{o}\ \mu\acute{\epsilon}\nu\ \eta\ \acute{\epsilon}\kappa\phi\omega\nu\omicron\nu\tau\alpha\ \mu\eta\kappa\acute{\upsilon}\nu\epsilon\iota\nu\ \tau\acute{o}\ \sigma\acute{\tau}\omicron\mu\alpha\ \acute{\omega}\varsigma\ \acute{\epsilon}\pi\iota\ \tau\acute{\alpha}\ \acute{\omega}\tau\alpha\ \acute{\epsilon}\kappa\alpha\tau\acute{\epsilon}\rho\omega\theta\epsilon\nu$, $\tau\acute{o}\ \bar{\omega}\ \acute{\epsilon}\kappa\phi\omega\nu\omicron\nu\tau\alpha\ \mu\eta\kappa\acute{\upsilon}\nu\epsilon\iota\nu\ \tau\acute{\alpha}\ \chi\acute{\epsilon}\iota\lambda\eta\ \acute{\omega}\varsigma\ \acute{\epsilon}\pi\iota\ \tau\eta\nu\ \acute{\rho}\acute{\iota}\nu\alpha\ \kappa\alpha\iota\ \tau\acute{o}\nu\ \pi\acute{\omega}\rho\omega\nu\alpha$ (*Bekkeri Anecd.* p. 797), and is confirmed by the fact that Cratinus and Aristophanes represented the bleating of the sheep by the syllable $\beta\eta$ (see Meineke, *Fragm. Com. Ant.* p. 40; Hesych. s. v. $\beta\eta$ λέγει; *Etym. M.* 196, 7; and *Bekker. Anecd.* p. 86).

117 Although we must reserve for subsequent chapters some further discussion of certain letters, we shall perhaps consult the convenience of the student by stating briefly in this place the results at which we have arrived respecting the Greek Alphabet in general. We enumerate in the established order all the characters at any time employed by the ancient Greeks. The original syllabarium is distinguished by the employment of capitals and Roman numerals, and we have added the Hebrew letter when the character is of Semitic origin.

- (1) I. $\mathcal{A}$, $\mathfrak{A}$, at first a mere breathing, afterwards a broad, open sound, frequently used as a representative of the nasal breathing, just as $\var�$ passes through $\mathfrak{A}$ into $\mathfrak{A}$.

- (2) II. *B*, ב, generally like our *b*, but sometimes, at it seems, employed as a *v*.
- (3) III. *Γ*, ג, a hard *g*, sometimes accompanied by a nasal breathing.
- (4) IV. *Δ*, ד, often pronounced with a lisp, and then approximating to *ð* and *q*.
- (5) V. *E*, ה, at first an aspirate, afterwards the residuary light vowel with which that aspirate was articulated; often pronounced like *y* when followed by another vowel.
- (6) VI. *F*, פ, a combination of the guttural breathing with the labial, most usually under the form *hv* or *hu*; in its original value the labial predominated.
- (7) ξ, צ, originally *ds*, transposed in some dialects to *sd*, and softened generally into the sound *j* or *sh*, which is equivalent to *di* or *gi*.
- (8) VII. *H*, ח, a hard aspirated guttural, pronounced *hg* or *gh*, afterwards a long vowel like the Hebrew *tsere* and our *a* in *ale*, but always implying some etymological absorption, especially the syllable *ua*.
- (9) VIII. Θ, ט, originally *hd* or *dh*, afterwards softened through *th* into an approximate sibilant, and always closely allied to *ð*.
- (10) ι, י, a vocalized guttural.
- (11) κ, כ, a substitution for *Q*: occurs twice as a final letter.
- (12) IX. *Α*, ל, sometimes approximated to the soft French *l*.
- (13) X. *M*, מ, } did not usually differ from their representatives
- (14) XI. *N*, נ, } in other languages; they came nearer to the *mediae* than to the *tenues*; thus *μ* delights in contacts with *β*, *ν* with *δ*; and in later applications of the alphabet, *μπ* represents *β*, and *ντ*, *δ*; the same appetency for a quasi-medial articulation is observable in the other dental liquids *λ*, *ρ*, which often represent *ν*, *δ*, or *ð*; *ν* is one of the most frequently used of the final consonants; and in this employment it has often taken the place of an originally final *μ*, or of *μ* which by apocope has become final; both *μ* and *ν* may approximate to the nasal breathing.
- (15) ξ, ש, originally *σχ* from *σχ* or *sh*; afterwards transposed to *ks*; in some dialects it retained its softer sound.

- (16) XII. O , ϑ , at first a mere nasal breathing; afterwards an intermediate value of the articulation vowel; sometimes pronounced as w before another vowel.
- (17) XIII. Π , ϑ , did not differ from its modern equivalent.
- (18) XIV. O , ϑ , properly a combination of guttural and labial, like F ; the guttural however predominated in this case.
- (19) ϑ , γ , approximated to δ and ϑ ; and is occasionally found as a final letter.
- (20) XV. Σ , C , ϑ , the most usual sibilant; very often occurs as a final.
- (21) XVI. T , γ , did not differ from the ordinary dental tenuis.
- (22) ν , the residuum of $F = hu$, when the letter became $\psi\lambda\acute{o}\nu$ by the omission of the aspirate.
- (23) φ , an imperfect substitute for another value of the lost F .
- (24) χ , a substitute for H after its disuse as a consonant.
- (25) ψ , an arbitrary combination of π and σ .
- (26) ω , a double o .
- (27) O , an arbitrary combination of σ and π , afterwards obsolete, except as a numeral sign. Its name was $\Sigma\alpha\mu\acute{\pi}\iota$, i. e. $\acute{\sigma}\acute{\alpha}\nu$ and $\pi\acute{\iota}$. The former represents the only Hebrew letter omitted in the above list, namely, ז or *Zain*, which was once used by the ancient Greeks.

118 (3) *Interchange of mutes in the Greek and cognate languages.*

We now come to the third subject of inquiry which we have proposed to ourselves in this Chapter—the changes which take place in the mutes or fundamental consonants of related words in the different languages of the Indo-Germanic family. The liquids usually remain unaltered in the corresponding words, and the breathings we have already considered. It has been perceived that the changes of the mutes generally follow a very striking law, which was first pointed out, in a partial and imperfect manner, by Rasmus Rask, and afterwards established, in its application to the Greek (Latin, Sanscrit), the Gothic, and Old High German, by James Grimm (*Deutsche Gramm.* i. p. 584 foll.). This law has been extended by Bopp (*Vergl. Gramm.* pp. 78 foll.) to the Zend and Lithuanian. Some of the exceptions to which the rule is liable have been indicated by Dr. Guest (*Prov. Phil.*

Soc. III. pp. 179 sqq.). The following table will afford the best explanation of the canons as given by Grimm.

	Labials.			Dentals.			Gutturals.		
Greek (Latin, Sanscrit)	<i>p</i>	<i>b</i>	<i>f</i>	<i>t</i>	<i>d</i>	<i>th</i>	<i>k</i>	<i>g</i>	<i>ch</i>
Gothic	<i>f</i>	<i>p</i>	<i>b</i>	<i>th</i>	<i>t</i>	<i>d</i>	..	<i>k</i>	<i>g</i>
Old High German	<i>b</i>	(<i>v</i>)	<i>f</i>	<i>p</i>	<i>đ</i>	<i>z</i>	<i>t</i>	<i>g</i>	<i>ch</i> <i>k</i>

Or,

Greek (Latin, Sanscrit).	Gothic.	Old High German.
Tenuis	Aspirate	Medial
Medial	Tenuis	Aspirate
Aspirate	Medial	Tenuis

It must be remarked, that the Gothic aspirate, to which the Greek tenuis corresponds, is not *ch*, for that combination does not exist in Gothic, but either *h* or *g* with a strong guttural aspiration. The same remark applies to the Latin, which, however, consistently employs the strong *h* for the Greek *χ* (see above, p. 200). In Old High German, *b* is superseded by *v*, a circumstance which has also taken place in the modern Greek and other languages, and instead of *th* we have *z=ts* by assibilation instead of aspiration.

119 The following exemplification of the law is taken with some slight modification from Bopp; we have subjoined his comparison of the Zend and Lithuanian with the languages included in Grimm's canon:

Sanscrit.	Greek.	Latin.	Gothic.	Old High German.
<i>pāda-s</i>	ποδ-ός	<i>pedis</i>	<i>fōtus</i>	<i>vuoz</i>
<i>panchan</i>	πέντε	<i>quinque</i>	<i>fimf</i>	<i>vinf</i>
<i>pūrṇa</i>	πλέος	<i>plenus</i>	<i>fulls</i>	<i>vol</i>
<i>pitrī</i>	πατήρ	<i>pater</i>	<i>fadrein</i> (pl.)	<i>vatar</i>
<i>upari</i>	ὑπέρ	<i>super</i>	<i>ufar</i>	<i>ubar</i>
<i>bhanj</i>	Φρήγ-νν-μι	<i>frango</i>	<i>brikan</i>	<i>prēchan</i>
<i>bhratṛ</i>	φράτωρ	<i>frater</i>	<i>brōthar</i>	<i>pruoder</i>
<i>bhrī</i>	φέρω	<i>fero</i>	<i>baira</i>	<i>piru</i>
<i>kapāla</i>	κεφαλή	<i>caput</i>	<i>haubith</i>	<i>houpit</i>
<i>tvam</i>	τῦ	<i>tu</i>	<i>thu</i>	<i>du</i>
<i>trayas</i>	τρεῖς	<i>tres</i>	<i>threis</i>	<i>drī</i>
<i>antara</i>	ἕτερος	<i>alter</i>	<i>anthar</i>	<i>andar</i>
<i>danta-m</i>	ὀδόντα	<i>dentem</i>	<i>thuntus</i>	<i>zand</i>
<i>dvau</i>	δύο	<i>duo</i>	<i>tvai</i>	<i>zuênê</i>
<i>dakshina</i>	δέξιος	<i>dextra</i>	<i>taihsvô</i>	<i>zēsawa</i>
<i>uda</i>	ὔδωρ	<i>unda</i>	<i>vatô</i>	<i>wazar</i>
<i>çvan</i>	κύων	<i>canis</i>	<i>hunths</i>	<i>hund</i>

Sanscrit.	Greek.	Latin.	Gothic.	Old High German.
<i>hr̥īdaya</i>	καρδία	<i>cor</i>	<i>hairtô</i>	<i>hërza</i>
<i>aksha</i>	ὄκος	<i>ocvulus</i>	<i>augô</i>	<i>ouga</i>
<i>açru</i>	δάκρυον	<i>lacrima</i>	<i>tagr</i>	<i>zahar</i>
<i>paçu</i>	πῶϋ	<i>pecus</i>	<i>faihu</i>	<i>vihu</i>
<i>çvaçura</i>	ἐκνυρός	<i>socer</i>	<i>svaihra</i>	<i>suehur</i>
<i>daçan</i>	δέκα	<i>decem</i>	<i>taihun</i>	<i>zëhan</i>
<i>jñâ</i>	γνώμι	<i>gnosco</i>	<i>kan</i>	<i>chan</i>
<i>jâti</i>	γένος	<i>genus</i>	<i>kuni</i>	<i>chuni</i>
<i>jânu</i>	γόνυ	<i>genu</i>	<i>knîu</i>	<i>chnîu</i>
<i>mahat</i>	μεγάλο-	<i>magnus</i>	<i>mikils</i>	<i>mihil</i>
<i>haṇsa</i>	χῆν	<i>'anser</i>	<i>gans</i>	<i>kans</i>
<i>hyas</i>	χθῆς	<i>heri</i>	<i>gistra</i>	<i>këstar</i>
<i>lih</i>	λείχω	<i>lingo</i>	<i>laigô</i>	<i>lëkôm.</i>

The following comparison shows that the Lithuanian ranks with the first three languages in the interchange of mutes.

Lithuanian.	Sanscrit.
<i>ratas</i> , "a wheel"	<i>rathas</i> , "a chariot"
<i>bûsu</i> , "I shall be"	<i>bhavishyâmi</i>
<i>kas</i> , "who"	<i>kas</i>
<i>dûmi</i> , "I give"	<i>dadâmi</i>
<i>pats</i> , "a husband or master"	<i>patis</i>
<i>penki</i> , "five"	<i>panchan</i>
<i>trys</i> , "three"	<i>trayas</i>
<i>keturi</i> , "four"	<i>chatvâras</i>
<i>ketvirtas</i> , "the fourth"	<i>chaturthas</i>
<i>szaka</i> , "a branch"	<i>çâkhâ</i>

In most cases the Zend also agrees with the Sanscrit as opposed to the Gothic.

Zend.	Sanscrit.	Gothic.
<i>tûm</i>	<i>tvam</i>	<i>thu</i>
<i>chathwârô</i>	<i>chatvâras</i>	<i>fidvor</i>
<i>pancha</i>	<i>panchan</i>	<i>fimf</i>
<i>pěřeno</i>	<i>pûrn'a</i>	<i>fulls</i>
<i>paitis</i>	<i>patis</i>	<i>faths</i>
<i>paçus</i>	<i>paçu</i>	<i>faihu</i>
<i>pâdha</i>	<i>pâdas</i>	<i>fôtus</i>
<i>pěřçaiti</i>	<i>prachch'hâti</i>	<i>fraihith</i>
<i>kô</i>	<i>kas</i>	<i>hvas</i>
<i>dashina</i>	<i>dakshina</i>	<i>taihsvô</i>

The Zend has no *bh*, and therefore agrees with the Gothic in the use of the medial for the aspirate.

Zend.	Sanscrit.	Gothic.
<i>baraiti</i>	<i>bibharti</i>	<i>bairith</i>
<i>brâtarēm</i>	<i>bhrâtaram</i>	<i>brôthar</i>
<i>uba</i>	<i>ubhâu</i>	<i>bai</i>
<i>abi, aiwi</i>	<i>abhi</i>	<i>bi</i>
<i>maidhya</i>	<i>madhya</i>	<i>midja</i>
<i>bandh</i>	<i>bandh</i>	<i>bindan</i>

There are other cases in which the Zend corresponds to the Gothic rather than to the Sanscrit; thus we have

Zend.	Gothic.	Sanscrit.
<i>thri</i>	<i>thri</i>	<i>tri</i>
<i>thwôî</i>	<i>thus</i>	<i>trê</i>
<i>fra</i>	<i>fra</i>	<i>pra</i>
<i>âfrînâmi</i>	<i>frijô</i>	<i>prînâmi</i>
<i>âfs</i>	<i>ahva</i>	<i>ap</i>

120 We have before pointed out that, in the use of the soft aspirate for *s*, the Zend corresponds to the Greek as contrasted with the Sanscrit and Latin. We now proceed to show that the Greek language, too, in addition to these agreements with the younger class of languages, also presents a peculiarity, in the use of the mutes, which belongs to the third rather than the first class of languages, according to this arrangement. This peculiarity consists in employing an aspirate of the labial or dental order instead of the corresponding medial or tenuis which appears in the Latin, Sanscrit, and Slavonian. In some of these cases the Sanscrit and Greek stand together against Zend and Latin, so that we must suppose that the effect of time in softening and aspirating has been more felt upon the pliant frames of the former than upon the tough antiquity of the two latter languages. The Sanscrit, in particular, presents many instances of softening and aspiration which are not found in any of the other more ancient languages of this family, as in the substitution of *ch* and *ç* for *k*, of *j* for *g*, &c. The following instances among others will show that the Greek sometimes forfeits its claim to a place among the oldest languages: the Latin or Slavonian *b* is represented by *f*, as in Old High German, in *ῥοφανος*, Latin *orbis*; *ἄλφος*, Latin *albus*; *ὑμφαλος*, Latin *umbilicus*, Lettish *nabba*; *ἄμφω*, *ἀμφί*, Latin *ambo*, *ambivium*, Zend *uba*, Gothic *bai*; in these last two cases the Sanscrit *nabhis*, *ubhâu* agree with the Greek: the form *ἀμφί* is still found in remains of the Æolic dialect: *p* is represented by *f* as in Gothic, in *κεφαλή*, Sanscrit *kapâla*, Latin *caput*; in

σοφός, Latin *sapiens*; β often becomes φ, and *vice versa*, in Greek itself, as κορυφή, κόρυμβος; στρέφω, στρέβλος, &c.; the *d* of the old languages is represented by θ, in θυγάτηρ compared with Sanskrit *duhitar*, Sclavonian *dotsher*, Lithuanian *dukter*; in θύρα, Sanscrit *dvār*, Sclavonian *dver*, and so forth. Mr. Winning would infer from the appearance of φ, θ, and χ, for *bh*, *dh*, and *gh* or *h* in Sanscrit, that the Greek language actually presents an aspirate instead of a medial in these cases (*Manual*, p. 42), and fancies that he has discovered in this a very curious interchange between Greek and Gothic, as in the following table (p. 111).

Older Greek.	Proper Gothic.	More recent Greek.	Older Gothic.
ὑδωρ	<i>vatō</i>	θυγάτηρ	<i>daughter</i>
δέξις	<i>taihsvō</i>	θύρα	<i>door</i>
πόδες	<i>fōtus</i>	ὄφρυς	<i>bra</i>
ἀγκύς	<i>akrs</i>	νεφέλη	<i>nibl</i>
γόνη	<i>knin</i>	χῆν	<i>gans</i>
μεγάλο-	<i>mikils</i>	χθῆς	<i>gistra</i>

But it must be remarked that in every instance which he has adduced as an exception, the consonant objected to is an aspirate, and that the Greek aspirates are only of the tenuis order, while those in general use in Sanscrit are only of the medial order, and that, therefore, no argument can be drawn from this discrepancy, which, indeed, admits of an explanation derivable from the vacillations and incompleteness of the aspirates (above, p. 201).

121 Grimm's law applies only to the interchange of mutes of the same order considered according to their distinction as *tenuis*, aspirates and medials. The interchange of mutes with others belonging to different organs, e. g. of labials with dentals or gutturals, is not an exception to the law, as Grimm calls it (i. p. 589), for it belongs to a different principle, which we propose to term "the law of divergent articulations," and which is illustrated and proved by the following induction.

When *p* is changed to *t* we must consider it as having arisen from a false articulation, which has formed a dental out of the sibilant originally attached to the labial in the particular case. Thus from the root *φα* or *πα* are formed both *τε* and *πον*. Similarly when *p* becomes *k*, as in *ποιός*, *κοῖός*, there has been an union of a guttural and a labial in the original sound; compare the Latin *quis*. When *b* becomes *d*, or *d* becomes *g*, the original sound must have comprised both consonants; thus *bis* and *δύς* spring from *δFίς*, like *bellum* from *dvellum*, and *γῆ* and *δῆ* from *γδῆ*, like *γυμνός* for *ἐγδυμένος*. This principle

extends to combinations of mutes and liquids as well as to combinations of mutes with mutes; thus *κελανός* and *μέλαν* spring from *κμέλαν*, as appears from *τὰ κμέλεθρα* quoted from the glossary of Pamphilus, by Herodian, and from him by the author of the *Etymologicum Magnum* (see Buttmann, *Lexilog.* II. p. 265).

We have sometimes double examples of these changes in the same word. Thus the Sanscrit *paktas* corresponds to the Greek *πεπτός* in its initial, and to the Latin *coctus* in its second syllable. But *coquo*, from which *coctus* is formed, gives us a compound of guttural and labial in the latter case, and as we are told that *coquus* was pronounced *quoquus* even in Cicero's time (Quintilian, *I. O.* VI. 3, § 47), we may infer that the original form of the verb was *quoquo*. So that *πεπτός* contains in both syllables only the labial part of the compound *qv=kp*; *coctus* contains in both syllables only the guttural ingredient; and *paktas* impartially omits the alternate elements. We have a very similar case in *vivus* compared with *quick* (above, § 112, note †). The Greek digamma furnishes constant examples of this principle, — that the archetype of incongruous articulations in cognate words must have been a compound sound containing, or capable of containing, both of the heterogeneous ingredients (above, § 110). But the digamma is limited to the combinations of the guttural with the labial, and the law which explains the ramifications in this particular case, is equally applicable, as we have just seen, to other combinations, such as the dental and labial, or the guttural and dental. Among the most usual of these exemplifications of "the law of divergent articulations," we must mention the occasional appearance of a resolvable compound sound before the interchangeable liquids *l* or *r*. The more usual instances are given in a subsequent chapter (§ 212). One or two examples will suffice to explain the principle. If we take the Latin *lac*, we observe no trace of any prefixed or initial sound before the *l*. But we get a guttural prefix as soon as we compare the Greek *γάλα(κ)*, *γλάγος*, and a labial prefix appears in the Gaelic *bligh*, Slavonic *mliet*, Latin *mulgeo*, Lith. *melzu*, Angl. Sax. *meolc*, English "milk." As these prefixes could not be derived from one another, there must have been a compound sound at the commencement of the word in its original form, and analogy suggests that this must have been, like the digamma, a labial preceded by a guttural. Now we have in Greek the verb *ἀμέλω*, and that the short initial vowel is the residuum of a guttural articulation is shown by the Greek *ἐρεμός* compared on the one hand with the Latin *remus* and the Gaelic *ramh*, and on the other hand with the Slavonic *greblo*, *h-reblo*, and the Welsh *rhwyf*. There are many other instances of the representation of an initial guttural by *ε* or *ο* (Benfey, *Wurzellex.*

II. p. 120). But the most interesting is ξ - $\lambda\epsilon\upsilon\theta\epsilon\rho\omicron\varsigma$ compared with the Latin *liber* and the Sanscrit *g-řidh* and *g-řibh* (Benfey, *l. c.* p. 140), because this furnishes us with another example of the principle under consideration, and leads to the important identification of the *Latini* and *Lavini* with the *Lithuanians*, whose name contains both forms, broken up again into the *Lettonians* and *Livonians* (Varron. p. 61). The aspirate presumed in the ξ - of ξ - $\lambda\epsilon\upsilon\theta\epsilon\rho\omicron\varsigma$ is transposed in the Welsh *rhydd*, and the same is the case in *rhwyf* compared with *hreblo*. To return to *lac*, the Welsh equivalent is not only *blith*, but *llaeth*, and there are very many instances in which a prefixed guttural or labial, or even a compound sound, is represented by this double *l*, the most familiar being the surnames *Floyd* or *Fludd* and *Fluellen*, as representatives of the Welsh *Lloyd*, *Llwyd*, and *Llewellyn*. And this leads us to another interesting comparison of ethnographic import. For while we may compare the $\mathcal{A}\acute{\epsilon}\lambda\epsilon\gamma\epsilon\varsigma$ (*Lleges*) with the $\mathcal{A}\acute{\iota}\gamma\upsilon\epsilon\varsigma$ (Varron. p. 63; *Cambridge Essays* for 1856, p. 35), we have a trace of the original prefix in the $\Phi\lambda\acute{\epsilon}\gamma\upsilon\epsilon\varsigma$ or $\Phi\lambda\epsilon\gamma\acute{\upsilon}\alpha\iota$ of Bœotia. The extent to which this double *l* may represent a compound prefix is shown by the Welsh *llid* compared with the Latin *lis* (*lit-*), originally *stlit-*, Old High German *strît*, Old Norse *strida*, Anglo-Saxon *flytan*, and Greek ξ - $\rho\iota(\delta)\varsigma$. The analogy of *stlatus* (*stlatarius*) and *stlocus* for *latus* and *locus*, seems to show that *t* is only an euphonic insertion, and it is omitted in the epitaph of Cn. Cornelius Scipio, where we have *sl. judik.* for *slitibus judikandis* (Varron. p. 224). That the *s* is the residuum of a compound articulation, which, besides the sibilant as a representative of the guttural, contained a labial element, may be inferred from a comparison of *stlocus* with the Breton *leach*, the Lithuanian *plecus* and the Lancashire *pleck*. The constant interchange of *l* and *r*, of which *stlit* and *strît* furnish an example, will hardly allow us to distinguish between the cases which are now under consideration, and those in which *r* is preceded by a moveable articulation. Of these cases there are many examples in Greek. Thus, for $\delta\acute{\iota}\xi\alpha$ we have the Æolic form $\beta\rho\acute{\iota}\xi\alpha$ or $\beta\rho\acute{\iota}\sigma\delta\alpha$, and this may be compared with the German *vaurts*, the Welsh *gwraidd*, and the Sanscrit *bradhna*. If the ξ represents an original γ , we may farther compare $\sigma\phi\omicron\rho\gamma\acute{\alpha}\omega$ and $\acute{\alpha}\sigma\pi\acute{\alpha}\rho\alpha\gamma\omicron\varsigma$. Similarly, we know that $\delta\acute{\eta}\gamma\gamma\upsilon\mu\iota$ had the digamma, for $\mathcal{F}\omicron\eta\eta\epsilon\iota\varsigma$ is quoted from Alcæus; and this is confirmed by the analogy of the Latin *f-rango*, German *b-rechen*.

On the whole we are disposed to regard this "law of divergent articulations" as involving a principle of scarcely less importance than Grimm's rule for the interchange of mutes of the same order, to which it may be regarded as a necessary supplement. The Greek grammarians were content to designate all interchanges of consonants by

the general name of *μετάληψις* (Heraclid. *ap. Eustath.* 1654, 19). Scientific etymology requires us to regard as entirely distinct cases the passage of one cognate sound into another, e. g. that of *p* into *b*; and the appearance of incongruous articulations in words confessedly of the same origin; and while we recognise the possibility of a direct transition in the former case, we must say of the latter, that "none of the known forms are strictly speaking original, but that all have branched out of some still older element, capable, according to known phonetic laws, of producing them all*."

It is right to add that the same phenomenon is observable in forms in which the complex sound is not the original articulation, but has arisen by some subsequent process of consonantal mutation. Thus in *Corfu* and *Negripont*, the corrupt modern names of *Κέρκυρα* and *ἐς τὸν Εὔριπον*, we have the labial and guttural elements respectively of the more recent articulations *Korkvra* (according to the modern sound of *v = v*) and *Evhripon = Egvripon*. Similarly in the French we have *cage* from *cavea*, *Dijon* from *Dibio*, *rage* from *rabies*, *sache* and *sage* from *sapiam* and *sapiens* (*Varron.* pp. 241, 244), where the complex sound, thus represented by one of its elements, has arisen from a mere synzesis of the vowel *e* or *i*, which has been thrown back on the preceding labial, has combined with it the palatal *j*, and afterwards superseded the original middle-sound, or converted the head of the firm into a sleeping partner. Something of this kind must be the true explanation of the fact that *rudere*, which has the first syllable short in the classical poets of the best age (*Virg. Georg.* III. 374; *Æn.* VII. 16; *Ovid, Fast.* I. 433; VI. 342; *de Art. Am.* III. 290), has the *u* long in *Pers.* III. 90. The perfect *rudivi* shows that there must have been a by-form *rudio* like *rugio*, and it is probable that *rūdere* was pronounced *rudjere* or *rugere*.

The interchange of aspirates of different organs we have before explained (above, § 108).

* This description of our principle is taken from the valuable paper by Mr. Garnett, "On certain initial letter-changes in the European languages" (*Essays*, p. 253). Mr. Garnett (p. 242) states it to be the object of his paper "to bring further evidence in favour of the general correctness of the above theory from some collateral sources of illustration, which it did not enter into Mr. Donaldson's plan to notice;" and he may be regarded as having demonstrated scientifically the proposition, which was briefly stated in the original edition of this work, not merely under the head of the digamma (above, § 110), but also in the present section. Mr. Garnett mentions that "nearly the same view of the subject," as far as the digamma is concerned, has been taken by Höfer in his *Beiträge zur Etymologik*, a work which we have never seen, but which was published soon after the first appearance of the present book.

122 We conclude this Chapter with a table of the consonants which correspond in related words of the Sanscrit, Greek, and Latin languages. If the reader desires to see this table immediately confirmed by examples, he may consult Pott's *Etymologische Forschungen*, i. p. 84 and following.

Sanscrit.	Greek.	Latin.
Gutturals. { k	κ, π	c (qv).
{ ksh	$\xi, \sigma, \kappa, \kappa\varrho (\pi)$	x (c-s) c, s, cr.
{ kh	χ	qv, gv.
{ g	γ, β	g, b.
{ gh	χ	gv.
{ n (like the final n in French)	γ (nasal)	n (adulterinum).

Palatals. { ch	π, τ	c (qv).
{ ch'h	$\sigma\chi, \sigma\kappa$	sc, c.
{ j	ξ	g.
{ jh	no example.	
{ n (palatal)	n (guttural)	some nasal.

The cerebrals have few if any representatives among the Greek and Latin letters.

Sanscrit.	Greek.	Latin.
Dentals. { t	τ, σ	t, s.
{ th	τ	t.
{ d	δ, ϑ	d, e.
{ dh	ϑ, σ	f, d.
{ n	ν, λ, ϱ	n, l.

Labials. { p	π, φ	p, l (qv).
{ ph	no example.	
{ b	β, π	b.
{ bh	$\varphi (\beta)$	f, b.
{ m	μ (β bef. liquids)	m.

Semivowels. { y (palatal)	$\zeta, \iota, \varepsilon, \vartheta$, aspirate	j, i.
{ r (lingual)	ϱ, λ	r, l.
{ l (dental)	λ	l.
{ v (labial)	$\varphi, \nu, \varepsilon, \beta, \varphi$, aspirate	v.

Sibilants. { ç (s palatal)	κ, σ , aspirate	c (qv) s.
{ sh (lingual)	σ , aspirate	s.
{ s (s dental)	σ , aspirate	s.
{ h (guttural)	χ, γ, κ	h, g, c.

APPENDIX

TO BOOK I. CHAP. V. § 110.

(A)

The Digamma as it appears in Inscriptions.

THE words, which exhibit the digamma in extant inscriptions have been collected and arranged in the order of the dialects by J. Savelsberg (*de digammo ejusque immutationibus dissertatio*, Aquis-grani, 1854). They are as follows:

I. Æolic Inscriptions.

a. Bæotic: Φυκίας (C. I. n. 1562, 1563, 1564); Φισοτελιαν (n. 1562, 1563); Φάρων nom. pr. (n. 1569, a. II.); Φελατή nom. urb., Φελατιή, Φέτεα, Φίκατι, Φάστιος (n. 1569, a. III.); Φάδων nom. pr. (n. 1574); ἄΦυδός=ἄοιδός, in compounds in ραψαΦυδός=ραψωδός (n. 1583); ΒακείΦαι nom. pr. (n. 1639); Φιλαρχιόντων (Leake, *Travels in Northern Greece*, II. n. 31); Φάσκων (Ib. n. 33); Φυκίας (Rhein. Mus. new series II. p. 107, n. 7); Φαστίνιος (Ib. p. 108, n. 8); Φαστυμειδόντιος and perhaps ἘπιΦάλτεις (Ulrichs, *Reise in Griechenland*. Vol. I. p. 247); ΕὐΦάρα and Φάστν (Eckhel, *Doctr. Num.* II. 196).

b. Elean: Φράτρα, Φαλείους, ΕὐΦαοίους, Φέτεα, Φέπος, Φάρον, Φέτας (Böckh, C. I. n. 11; Staatshaush. II. p. 390).

II. Doric.

a. Crissæan: ἔχοι κλέΦος ἄπθιτον αἰφέι (Böckh, C. I. n. 1; Ulrichs, *Reise*, I. p. 31).

b. Argive: Φίκα[τι] (Böckh, C. I. n. 18); πεδάΦοικοι (n. 19); ΔιΦί (n. 29).

c. Spartan: ἐδέδοφα (n. 15); Φίκατι (n. 1511); Φασστυόχο (n. 1520; Ahrens, *dial. Dor.* p. 100).

d. Cretan: Φικαδίωνος nom. propr. (C. I. n. 2598); Φανξίων (n. 3050); Φαξίων (Eckhel, *Doctr. Num.* IV. p. 388); Φελχάνος (Bull. del Inst. Arch. 1841, pp. 61, 174, cf. Hesych. Φελχάνος, ὁ Ζεὺς παρὰ Κορήν).

e. Corcyræan: Φάσ[τυ] (C. I. n. 20); ΤλασίαΦο (cf. the form of the gen. in the Phrygian inscription, above, § 92), πρόξενΦος, ροΦαίσι, στονόΦεσσάν and perhaps ἀριστεύΦοντα and ἄΦυτάν (Trans. Philol. Soc. Vol. I. n. 14; Zeitschr. f. vergl. Sprachf. I. p. 118).

f. Italian (in Magna Græcia): *Αἴφας* (*Monum. inedit. del Inst. Arch. Rom. Tom. II. tab. VIII. IX.*); *τᾶς Ηῆρας Ηιαρός ἐμὶ τᾶς ἐν πεδίῳ· Οὐνισκός με ἀνέθηκε, Ὅρταμος Φέριον δεκάταν* (on a votive axe, *Ephem. Archæol.* n. 61; *Bullet. Napol.* n. 18, p. 422); *ῤέτος, ῤέτεος, ῤέτει, ῤέτη, ῤετέων, ῤεξήμοντα, ῤεξακάτιαι, Φιδίαν, Φιδίαι* (ἐν τᾷ *Φιδίᾳ γᾶ*), *ἐρφηληθίωντι* (ἐξειληθῶσι), *ῤίκατι, Φικατίδειον, Φικατίπεδον, ῤέκατι, ῤέξ, ῤέκτα* (*Tabulæ Heracleenses*); *Φοικίαν* (*C. I.* n. 4).

III. *Ionic*: [τ]ο αἴφυτον λιθο ἐμὶ ἀνδρίας καὶ το σφέλας (*Böckh, C. I.* n. 10), i. e. ταύτου λίθου ἐμὶ ἀνδρίας καὶ τὸ σφέλας, "of the same stone I am a statue and its basis" (*Bentley, Correspondence*, ed. Wordsworth, pp. 589, 598).

(B)

Extracts from BENTLEY'S MS. on the Digamma.

BENTLEY first quotes the following authorities: *Dionys, Halic.* I. 20. *Servius, ad Æneados* VI. 359. *Julianus, Orat.* XI. p. 71; and the following passages from "*Grammaticæ Latinæ auctores antiqui; edidit Putschius.*" *Diomed. Gramm.* p. 416. *Priscian, pp.* 546, 7 (where, on the words—*inveniuntur etiam pro vocali correpta hoc digamma illi usi, ut Aleman: καὶ χεῖμα πῦρ τε δάφιον*¹.—*F digamma Æolis est, quando in metris pro nihilo accipiebant, at ἄμμες δ' Φειράναν τὸ δὲ τᾶρ θέτο μῶσα λγεῖα*².—*Sciendum tamen quod hoc ipsum Æoles quidem ubique loco aspirationis ponebant, effugientes spiritus asperitatem*³. *Hiatus quoque causa solebant illi interponere F digamma, quod ostendunt etiam poetæ Æolidæ; uti Aleman: καὶ χεῖμα πῦρ τε δάφιον* et epigrammata quæ egomet legi in tripode vetustissimo *Apollinis, qui stat in Xerolopho Byzantii, sic scripta: ΔΕΜΟΠΗΟΦΟΝ*⁴, *ΔΑΦΟΚΟΦΟΝ*. *Nos quoque hiatus causa interponimus U loco* (τοῦ) *digamma F, ut DaUus, ArgiUi, PaUo, OUum, OUis, BoUis*⁵—he remarks (1) *Si locus sanus est, errat Priscianus: nam in iambico dimetro, cujus hæc forma est:*

ἐρῶ τε δῆτα κοῦν ἐρῶ—
καὶ μαινόμεν κοῦ μαινόμεν—
Phaselus ille quem vides—

δάφιον facit longam primam syllabam. Sed sæpe apud Homerum correpta syllaba est, ut Ὀφίων, Ὀφίας, &c. (2) Non pro nihilo hic F accipitur, sed pronuntiatur δφειράναν, ut nos possumus DWIRANAN. (3) Non ubique et in omnibus Æoli inserebant F, sed in certis tantum verbis, ut ex Homero constabit. Et sic Dionysius supra, πολλά non πάντα; et Sergius infra, "in quibusdam dictionibus:" et Terentianus Maurus "nominum multa." (4) Sic Codex MS. Cantabrigiæ, non

Ἀημοφών, unde constat tripodem illum vetustiores esse literis *Simondeis*, η, φ, &c., ut *Homerus* quoque scribebat *MENIN AEIΛE THEA ΠEAEIΛE O AKHIE OΣ*. (5) Constat ex hoc loco *Æoles* scripsisse, *Ἀἶφος, Ἀργεῖφοι, ταφώς, ὠφον, ὄφης, βοφός*). — *Valerius Probus*, p. 1507. *Sergius Grammat.* p. 1827 (where, on the words — *Æolenses enim Græci quibusdam dictionibus, ut pinguescant, istam digammon apponunt, ut pro ELENA dicunt UELENA. Sed Donatus hic arguitur, quod apud Græcos digammos hanc legem habeat, ut u detracta, nihil absit nomini. — Bentley remarks — nihil abest nomini in ceteris dialectis Græcorum, at apud Æolenses deperit totum: nam illi pro φοῖνος nunquam dicebant οῖνος, non magis quam Latini pro VINUM, INUM, aut pro VULGUS, ULGUS*). *Velius Longus*, p. 2217: *Qui igitur illam literam (H) vindicant, ostendunt ejus eandem vim esse quæ consonantis est; nam et in metro asserit sibi hanc potestatem. Unde et apud Homerum non videntur esse vitiosi versus, qui hac aspiratione suppleantur: ἦ ὀλίγον οἱ παῖδα ξοικότε γέλαιο Τυδεύς. Et hoc amplius adeo litera est, ut possit videri etiam vicem duarum consonantium implere, ut ὥς εἰπὼν τόξον μὲν ἀπὸ ἔο θῆκε χαμᾶζε. Et tale quidem exemplum apud nos non animadverti.* (On which Bentley observes — *Velius ille hic fallitur, qui id ascribit aspirationi H quod debetur τ ῶ F; ὀλίγον Ηοι pro ὀλίγον Φοι, et ἀπὸ Ηεο pro ἀπὸ Φεο. Sic dedit Homerus: ἦ ὀλίγον Φοι παῖδα Φεοίκωτα γέλαιο Τυδεύς. et ὥς Φειπὼν τόξον μὲν ἀπὸ Φεο θῆκε χαμᾶζε*). *Idem*, pp. 2222, 2235. *Scaurus Gramm.* p. 2254. *Annæus Cornutus*, p. 2282. *Cassiodorus*, p. 2292. *Terentianus Maurus*, pp. 2387, 2397. *Marius Victorinus*, pp. 2461, 2468. He then proceeds: *Claudius Cæsar pro U consonanti scribi jussit F Æolicum, sed inversum ne confunderetur cum F, quod alium tunc sonum habuit. Qualia visuntur in inscriptionibus ævi Claudiani apud Gruterum. Suetonius in Claudio, c. 41. Tacitus, Annal. xi. 14. Aulus Gellius, xiv. 5. (xvi. 17) Donatus, ad Andr. Terent. i. 2. Although Bentley was well aware that F has occasionally the power of a double consonant in Homer, it never seems to have struck him that the original sound might have been made up of a guttural and a labial, and therefore he presumes that Hesychius must be wrong when he writes a number of digammated words with a guttural. Hesychius sane, he says, ridiculus est qui pluribus verbis Æolicis pro F digamma simplicem γ posuit. His notion was, that the digamma was nothing more nor less than our w, as appears from the following note in this MS: U Latinorum olim pronuntiabatur ut W hodie. U consonantem eandem vim et sonum habuisse quam F Æolicum omnes testantur. Dionysius Οὐέλλα, Φέλλα, Uelia, et Julianus ΟΥ. Gruter. p. 1027. ΟΚΤΑΟΥΙΟΣ, Octavius, ΣΕΟΥΑΡΟΣ, Severus, ΟΥΕΙΒΙΟΣ, Vibius, ΟΥΙΒΙΑΝΟΣ, Vibianus, ΟΥΑΛΕΠΙΟΣ, Valerius, ΟΥΕΝΕΠΙΑ, Veneria,*

et in historicis Græcis nomina infinita. Idem ostendunt nomina quæ nos, hoc est, Germani veteres, ex Latinis sumpsimus. Unum, hoc est Vinum, "wine;" Uallum, Wallum, "a wall;" Uolo, wolo, "I will;" Uentus, wentus, "wind;" Uectis, Wectis, "weight;" Uellus, wellus, "wool;" Uidua, Widua, "Widow."

The greater part of this MS. is filled with a number of lines from Homer, in which digammated words appear. We quote those in which he has introduced any emendations.

Ἀναξ, ἀνάσσω, &c.

Iliad. VII. 162. ὦρτο πολὺν πρῶτος μὲν ἄναξ, *lego* πρῶτός γε Φάναξ, *vel* πρώτιστα.

IX. 73. πολέεσσι δ' ἀνάσσεις, *lego* πόλεσιν δὲ Φανάσσεις.

X. 33. Ἀργείων ἥρασσε, *lego* ἑΦάνασσε.

XX. 67. ἐναντα Ποσειδάωνος ἄνακτος, *forte* ἀναστάς.

XXIV. 449. τὴν Μυρμίδονες ποίησαν ἄνακτα, *lego* δείξαντο Φάνακτα. *Cf.* 452.

Od. XIV. 438. κῦδαινε δὲ θυμὸν ἄνακτος—*versus spurius* (Porson suggests θυμὸν δ' εὐφορηνε Φάνακτος).

Ἀνδάνει.

Iliad. VII. 45. βουλὴν ἧ ῥα θεοῖσιν ἐφήνδανε, *lego* θεοῖς ἐπιΦάνδανε.

Od. XVI. 387. εἰ δ' ὑμεῖς ὅδε μῦθος ἀφανδάνει. (This seems to have puzzled Bentley: we read ἀΦανδάνει with Passow.)

Ἄστυ; inde Φαστύνοος, Φαστύαλος, ΦαστυΦάναξ, Φαστυβοώτης.

Iliad. III. 140. ἀνδρὸς τε προτέρου καὶ ἄστεος, *lego* προτέρου καὶ Φάστεος.

XI. 732. ἀμφίσταντο δὴ ἄστυ, *lego* τὸ Φάστυ.

XVII. 274. νύκτα μὲν εἰν ἀγορῇ σθένοος ἔξομεν, ἄστυ δὲ πύργοι, *lego* ἔξετε, Φάστυ.

Εἶδω, video.

Iliad. XXII. 450. δεῦτε, δῶ μοι ἔπεσθον, ἰδῶμ', *lego* ἔπεσθε, Φίδῶμ'.

Od. VI. 160. οὐ γάρ πω τοιοῦτον ἶδον, *lego* τοίονδε Φίδον.

IX. 182. ἐνθαδ' ἐπ' ἐσχατὴν σπέος εἶδομεν, *lego* εὕρομεν.

Quære de ἐσιδων, &c.

Εἶσχω.

Iliad. XXI. 332. μάχῃ ἡττοκομεν εἶναι, *lego* ἑΦεῖσκομεν.

379. οὐ γάρ ῥοικεν, *lego* οὐδέ Φεοικεν *ut* v. 435.

Od. IV. 247. φῶτι κατακρύπτων ἥϊσκε, *lego* ἑΦεῖσκει.

IX. 321. τὸ μὲν ἄμμες εἶσκομεν εἰσορόωντες—ἄμμε *semper casus est accusativi* (why not ἑΦίσκομεν?).

- XIX. 283. τόγε κέρδιον εἶσατο θυμῷ (read τόγε Φείσατο κέρδιον εἶναι).

Inde mendosum est δ' ἦϊκτο quod quater venit pro δὲ Φείκτο.

Ἑκαστος.

Iliad XVI. 151. μέγα σθένος ἔμβαλ' ἐκάστω, *lego* ὤρσε Φεκάστω.

Od. IX. 468. ἀνὰ δ' ὄφρουσι νεῦον ἐκάστω, *lego* νεῦσα.

XV. 377. φράσθαι καὶ ἕκαστα πνυθέσθαι, *lego* ἅπαντα.

XVII. 70. τοὶ δ' ἐξερέεινον ἕκαστα, *lego* ἅπαντα.

Cf. Od. XI. 228. ὅπως ἐρέοιμι ἐκάστην *et mox* 233, ἐγὼ δ' ἐρέεινον ἀπάσας, *ubi Eusthatus* ταῦτόν, ὥς καὶ ἀλλαχοῦ, τὸ ἐκάστην καὶ τὰς ἀπάσας.

Iliad XIX. 302. Πάτροκλον πρόφρασιν, σφῶλν δ' αὐτῶν κήδε' ἐκάστη, *lego* ἅπασαι.

332. δείξιαις ἕκαστα, *lego* ἅπαντα.

Od. VIII. 15. θυμὸν ἐκάστου, *lego* ἁπάντων.

IX. 127. τελέειν ἕκαστα, *lego* ἅπαντα.

Ἑκας.

Od. VII. 321. μάλα πολλὸν ἐκαστέρῳ ἔστ' Εὐβοίης (read πολλὰ Φεκαστέρῳ).

Ἑκήβολος.

Iliad I. 21. ἄζόμενοι Διὸς νῖδον Ἑκήβολον Ἀπόλλωνα, *lego* νῖα Φεκήβολον.

438. ἐκ δ' ἐκατόμβην βῆσαν ἐκηβόλῳ Ἀπόλλωνι, *lego* βῆσε.

Ἑλίσσω, &c. εἰλέω, εἰλύω.

Iliad XVIII. 522. ἔνθ' ἄρα τοίγ' ἵξοντ' εἰλύμενοι, *lego* ἵξον Φειλύμενοι.

XXIII. 320. ἀφραδέως ἐπὶ πολλὸν ἐλίσσεται, *lego* πολλὰ Φελίσσεται.

Ἑλπομαι.

Od. II. 91. πάντας μὲν δ' ἔλπει, *lego* μὲν Φέλπει.

IX. 419. οὕτω γάρ πού μ' ἤλπετ' ἐνὶ φρεσὶ νήπιον εἶναι, *lego* πού Φέλπετ'.

Ἑπος, εἰπω, &c.

Od. I. 10. θύγατερ Διὸς εἰπέ καὶ ἡμῖν. (The MSS. omit Διός, and we might substitute σὺ δέ; Bentley offers no emendation, but refers to his note on the passage, which we cannot find.)

91. μνηστῆρεςιν ἀπείπεμεν, *lego* μνηστῆρεσσ' ἀπο-Φείπεμεν.

II. 269. } καὶ μιν φωνήσας ἔπεα, *lego* ut sæpius φωνήσασα

VII. 216. } Φέπεα *per crasin*.

II. 331. αὐτ' εἶπεσκε, *lego* αὖ Φείπεσκε.

III. 264. θέλγεσκ' ἐπέεσιν, *lego* θέλγεσκε Φέπεσιν.

427. μένεντ' αὐτοῦ ἀόλλεες εἶπατε δ' εἴσω, *lego* ἀολλεῖς
φείπατε.
 IV. 637. αὐτίκα δ' ἥγ' ἐπέεσσιν, *lego* ἥγε *φέπεσσιν*.
 159. τὸ πρῶτον ἐπεσβολίας ἀναφαίνειν, *lego* τὰ πρῶτα
φεπεσβολίας ut saepe.
 682. ἧ εἰπέμεναι δμῳῇσιν, *lego* ἧ *φειπεῖν*.
 VII. 275. ᾧδ' εἴπῃσι, *lego* ᾧς *φείπῃσι*.
 VIII. 27. Dele τ'. 91. *lego* τέρποντο *φέπεσσιν*.
 IX. 224. *lego* κίσσοντο *φέπεσσι*. 258, 363. *lego* ᾧς *φέπέεσσιν*.
 IX. 279. ἀλλά μοι εἴφ' ὅπῃ ἔσχες, *lego* ἀλλ' ἄγε *φείφ'*.
 XI. 296. θέσφατα πάντ' εἰπόντα, *lego* Φοι *φείποντα*.
 560. ἀλλ' ἄγε δεῦρο ἄναξ ἵν' ἔπος καὶ μῦθον ἀκούσης,
lego ἵνα πον καὶ—
Iliad VII. 349. ὅφρ' εἴπω, *lego* ᾧς *φείπω*.
 IX. 61. ξείπω, *lego* ἐκ*φείπω*.
 376. *lego* ἐξαπάφοι *φεπέεσσι*· *φάλις δέ Φοι*· ἀλλὰ *φέκηλος*.
 X. 425. εὐδουσ' ἧ ἀπάνευθε; δειπέ μοι, *lego* δια*φείπεμεν*.
 XI. 790. *lego* τὰ *φείποις*.
 XV. 398. ὀλοφυρόμενος δ' ἔπος ἡνῦδα, *lego* δὲ προσ*ηνῦδα*.
 I. 555. δειδοῖκα κατὰ φρένα μή σε παρείπῃ, *lego* μὴ
παρφείπῃ.
 XIX. 35. *lego* μῆνιν ἀπο*φείπων* Ἀγαμέμνονι.

Ἔργον*.

- Iliad* XIX. 245. γυναικὸς ἀμύμονος ἔργ' εἰδυίας, *lego* ἀμύμονα
φέργα φιδυίας.
Od. XIV. 344. εὐδείελον ἔργα, *lego* εὐδείελα *φέργα*.
 XI. 473. ἔτι μῆϊζον ἐνὶ φρεσὶ μήσσει ἔργον, *lego* μήσσαι *φέργον*.
 XVII. 313. ἡμὲν δέμας ἡδὲ καὶ ἔργα, *lego* ἡδέ τε *φέργα vel τι*.
 XXII. 422. τὰς μὲν τ' ἔργα διδάξαμεν ἐργάζεσθαι, *lego* μὲν
φέργα διδάξαι φεργάζεσθαι.

Ἐρύω.

- Od.* X. 402, 422. νῆα μὲν ἄρ' ἀμπρωτον ἐρύσσετε, *lego* ἀμπρωτα
φερύσσετε.
 XVI. 348. ἀλλ' ἄγε νῆα μέλαιναν ἐρύσσαμεν ἥτις ἀρίστη
 (perhaps we may read ἀλλ' ἄγε δὴ καὶ νῆα
φερύσσαμεν; at any rate the epithet μέλαιναν
 seems unnecessary).

Ἰάχω, ἰαχή, &c.

- Od.* II. 428. μέγαλ' ἴαχε, *lego* μέγα *φίαχε*.
 IV. 458. ἡμεῖς δ' αἰψ' ἰαχοντες (omit αἰψ', and read δὲ
φιάχοντες).

* We may add *Iliad* VI. 289; where we should read ἐνθ' ἔσαν οἱ
 πέπλοι, παμποίκιλα φέργα γυναικῶν, the old reading παμποίκιλοι being
 objectionable on syntactical grounds also.

- IX. 395. *σμερδάλεον δὲ μέγ' ὤμωξεν περὶ δ' ἱαχεπέτρῃ* (read *σμερδάλεον δ' ὤμωξε, περὶ δ' ἐπιφίαχε πέτρῃ*).

Iliad XIII. 835. *Ἀργεῖοι δ' ἐτέρωθεν ἐπίαχον, forte ἐφίαχον vel -ρωθ' ἐπιφίαχον.*

Ἴσος.

Iliad XXIII. 736. *ἄεθλα δ' ἴσ' ἀνέλοντες, lego ἄεθλα δὲ Ἴσ'.*

Οἶδα.

Od. I. 428. *κέδν' εἰδυῖα, lego κέδνα Φιδυῖα.*

II. 111. *ὑποκρίνονται, ἵνα εἰδῆς, lego -νονθ' ἵνα Φειδῆς.*

IX. 534. *οὐκ εἰδότη', lego οὐ Φειδότη'.*

XI. 432. *λνγρ' εἰδυῖα, lego λνγρὰ Φιδυῖα.*

XV. 417. *καὶ ἄγλαα ἔργ' εἰδυῖα, lego ἄγλαα Φέργα Φιδυῖα.*

Οἶκος.

Od. XIII. 42. *ἀμύμονα δ' οἴκοι ἄκοιτιν—an ἔνδον?*

XIV. 318.

XVII. 84.

} *ἦγεν ἐς οἶκον, lego δόμονδε.*

XIII. 121. *ὥπασαν οἴκαδ' ἰόντι, lego Φοίκαδ' ὥπασσαν ἰόντι.*

Iliad I. 19. *εὔ δ' οἴκαδ' ἰκέσθαι, lego εὔ δ' Ἄργος ἰκέσθαι.*
And in a note on this passage he says—*Homero semper est Φοῖκος, Φοίκαδε. Ergo hic scribendum εὔ δ' Φοίκαδ', DWOIKAΔ' ut Anglice DWELL. Priscianus: est quando in metris pro nihilo accipiebant, ut Ἀμμες δ' Φειράναν.*

Οἶνος.

Iliad VII. 467. *παρέστασαν οἶνον ἄγοντες, lego πάρεδσαν Φοῖνον.*

IX. 224. *πλησάμενος δ' οἶνοιο δέπας, lego πλησάμενος Φοῖνοιο vel πλήσας δὲ Φοῖνοιο.*

Od. XX. 255. *ἐφροχόει δὲ Μελανθεός, lego ἐΦοινοχόει.*

He also quotes the following exceptions, without proposing any emendations: *Iliad* XVIII. 545; *Od.* II. 46. *μελιφήδεος Φοῖνον.* *Od.* XI. 61. *ἀθέσφατος Φοῖνος.*

Οἶ, sibi, ἔ, se, ἔο, sui.

Iliad V. 338. *ὃν οἱ χάριτες κάμον αὐταί. Versus spurius.*

VI. 90. *πέπλον ὅς οἱ δοκέει, lego ὅ Φοι.*

101. *μαίνεται οὐδέ τις οἶ, lego οὔτις Φοι.*

᾽Ος, suus, ἦν, ῥ, &c.

Iliad XIII. 561. *Ἀσιάδην ὅς οἱ οὔτα, lego ὅ Φοι.*

XIV. 407. *ὅττι δὴ οἶ, lego ut MSS. ὅττι ῥά Φοι.*

XIX. 384. *πειρήθη δ' ἐδ' αὐτοῦ (read δὲ Φε' αὐτοῦ).*

The following passages are quoted without emendation: *Iliad* XX. 282. *ἄχος οἱ χύτο (read ἀχλὺς χύτο).* XXIV. 73. *ἦ γάρ Φοι.* *Od.* IX. 360. *αὐτάρ Φοι αὐτός ἐγώ.*

- Iliad* VI. 474. αὐτὰρ ὅγ' ὃν φίλον υἱόν, *lego* αὐτὰρ ὁ Φόν.
 XII. 162. ὥμωξέν τε καὶ ὦ πεπλήγετο μηρῷ, *lego* ὥμωξεν
 καὶ ἐὼ πεπλ. μ.
 XI. 330. οὐδὲ ξοὺς παῖδας ἔασκε, *lego* οὐδὲ Φοὺς (or
 rather σφούς).
Iliad XVII. 90, XVIII. 5, XX. 343. εἶπε πρὸς ὃν μεγαλήτορα θυ-
 μόν, *lego* ἔφη πρὸς Φόν (or rather σφόν).
Od. IV. 4. θνγατρὸς ἀμύμονος ᾧ ἐνὶ οἴκῳ, *lego* ἀμύμονα Φῶ *ad*
 γάμον.

Ως, *tamquam*.

Iliad III. 196. αὐτὸς δέ, κίλος ὤς, *lego* ψιλὸς ἐὼν ἐπιπωλεῖται,
 and in a note on the passage he says—*Quot sunt in hoc versiculo peccata, licet ita citatus a vetere Scholiaste Nicandri, et Timone de Cleanthe apud Diogenem Laertium in Cleanth. τίς δ' οὗτος, κίλος ὤς, ἐπιπωλεῖται στίχας ἀνδρῶν. Primum ex Æolismo: oportet enim,—ut semper ὤς “sicut,” “tamquam”—κίλος Φως esse, metro repugnante. Quale vero illud “obit ordines virorum tamquam Aries”? Nondum vidi Arietem virorum ordines moderantem. Quæ vero ταυτολογία! “Obit, tamquam ARIES; et comparo eum ARIETI.” Ex ipsa sententia locum restituo. Versu priore dixerat, “Arma ejus humi posita sunt.” quorsum hoc, nisi ut inferret INERMEM eum obire ordines militum? Lego igitur*

αὐτὰρ ψιλὸς ἐὼν ἐπιπωλεῖται στίχας ἀνδρῶν.

Sic δ, 230, *simili orationis filo*:

ἵππους μὲν γὰρ ἔασε καὶ ἄρματα ποικίλα χαλκῷ—
 αὐτὰρ ὁ πέξος ἐὼν ἐπιπωλεῖτο στίχας ἀνδρῶν.

et ζ, 214:

ἔγχος μὲν κατέπηξεν ἐπὶ χθονὶ πουλυβοτείρῃ,
 αὐτὰρ ὁ μελιχίοισι προσηγῆδα ποιμένα λαῶν.

Ceterum nihil refert quod est αὐτὰρ ψιλός non ὁ ψιλός, ob asperitatem duplicis literæ. Sic enim supra γ', 18, αὐτὰρ ὁ δοῦρε δύω: meliores ἐκδόσεις habuerunt sine articulo αὐτὰρ δοῦρε.

It is hoped that these extracts will gratify any curiosity which may still be entertained with regard to the manner in which Bentley proposed to restore the digamma to the text of Homer.

CHAPTER VI.

THE PARTS OF SPEECH.

123 Different arrangements of the parts of speech. 124 Their syntactical division derived from the Dialectic of Plato. 125 Aristotle's Categories considered with this reference. 126 Horne Tooke's fallacious use of the syntactical parts of speech. 127 The empirical arrangement is mainly syntactical. 128 The real etymological distribution of words.

123 **I**T has been already mentioned more than once, that there are two divisions of philology, the etymological and the syntactical, and that it is of great importance to keep distinct these two departments. The distribution of words into the parts of speech, as they are called, has been a fruitful source of error to those philologists who have failed to observe that there are two distinct methods according to which this distribution may be effected, the one syntactical, and the other etymological; of which the former considers words only according to their distinction as parts of a logical proposition, while the latter analyzes the words themselves, and sets forth the primary elements from which the different kinds of words have sprung. There is a third method based on the former of the two which we have just mentioned; but as its object is merely to facilitate the acquirement of particular languages, and as it differs with those languages, it has never been thought worthy of discussion in formal treatises.

We propose to examine the syntactical arrangement of the parts of speech, before we set forth that etymological distribution, according to which the investigations in the following pages are carried on.

124 The syntactical division of the parts of speech may be traced to the first beginnings of dialectic or logic, in other words, to Plato. The formation of a system of logic is, in fact, simply a discovery of the principles of syntax, or of the structure of sentences; for, as far as the reasoning faculty is concerned, logic is nothing but the nomenclature and method of the process which

every man carries on in his discourse. Logic is conversant with the truth or falsehood of propositions and not with single words (Aristot. *de Interpret.* I.; Cicero, *Tuscul. Disput.* I. 7; Aulus Gellius, xvi. 8). The first step, therefore, in logical analysis, is the division of a sentence or proposition into its fundamental parts. These fundamental parts we call the subject, copula, and predicate; in other words, the proposition must contain either a nominative case + verb-substantive + some predicate, or, a nominative case + (verb = verb-substantive + some predicate). Thus "I run" is equivalent to "I am running." The Greek, however, does not make much use of the copula, the article being considered sufficient to distinguish the subject from the predicate; thus ὁ ἵππος λευκός is fully equivalent to ὁ ἵππος ἐστὶ λευκός. In by far the greater number of cases the Greek verb contains both copula and predicate. Accordingly, it was natural enough that, in analyzing the sentence into its primary elements, Plato should consider these as consisting simply of the noun (ὄνομα) and the verb (ῥῆμα)*, for as Plutarch observes (*Quæstiones Platonicæ*, p. 111 Wyttēb.): ῥήματος ὀνόματι συμπλεκόμενον, τὸ γινόμενον εὐθὺς διάλεκτός ἐστι καὶ λόγος, and Apollonius Dyscolus says (*de Syntaxi*, p. 19 Bekker), that the noun and verb are τὰ ἐμψυχότατα μέρη τοῦ λόγου. Plato brings forward this division most directly in his *Sophistes* (p. 261 E—262 C): ἐστὶ γὰρ ἡμῶν που τῶν τῇ φωνῇ περὶ τὴν οὐσίαν δηλωμάτων διπλὸν γένος—τὸ μὲν ὀνόματα, τὸ δὲ ῥήματα κληθέν—τὸ μὲν ἐπὶ ταῖς πράξεσιν ὃν δηλωμα ῥημά που λέγομεν—τὸ δὲ γ' ἐπ' αὐτοῖς ἐκεῖνα πράττουσι σημεῖον τῆς φωνῆς ἐπιτεθὲν ὄνομα. οὐκοῦν ἐξ ὀνομάτων μὲν μόνων συνεχῶς λεγόμενων οὐκ ἐστὶ ποτὲ λόγος οὐδ' αὖ ῥημάτων χωρὶς ὀνομάτων λεχθέντων—οὐδεμίαν γὰρ—πρᾶξιν

* That the ancient Greeks did not make much distinction between ὄνομα and ῥῆμα, is clear from Thucydides, v. 111, where we find the words used as synonymous in an emphatic passage: ὀνόματος ἐπαγωγὸν δυνάμει—ἡσσηθεῖσι τοῦ ῥήματος. We remark in passing that for ἦν—ἐστὶ at the end of the chapter, we ought to read ἦν—ἴσταντε. The MMS. have ἔτε and ἴσεται. Plato himself sometimes uses ὀνόματα and ῥήματα as synonyms; cf. *Gorg.* p. 489 B: ὀνόματα θηρεύον. 489 E: ὀνόματα λέγεις. In the singular he uses τὸ ῥῆμα to signify "common parlance;" *Resp.* 340 D: λέγομεν τῷ ῥήματι οὕτως. p. 490: οὐ ῥήματα θηρεύω.

οὐδ' ἀπραξίαν οὐδὲ οὐσίαν ὄντος οὐδὲ μὴ ὄντος δηλοῖ τὰ φωνηθέντα, πρὶν ἂν τις τοῖς ὀνόμασι τὰ ῥήματα κεράσῃ· τότε δὲ ἤρμοσέ τε καὶ λόγος ἐγένετο εὐθύς ἢ πρώτη συμπλοκή, σχέδον τῶν λόγων ὁ πρῶτος εἰ καὶ μικρότατος. It must be remarked on this passage, that Plato included in the word ῥήμα all that could be called a predicate or descriptive word, as distinguished from the subject or word of designation, namely the verb and the adjective as distinguished from the substantive; for he could not have overlooked the obvious fact, that in the Greek language a verb may alone constitute a whole sentence: thus, *τρέχει* means "he is running." Similarly in the *Cratylus* (p. 431 B), he speaks of falsifying the meaning of ὀνόματα and ῥήματα as the same process: εἴη ἂν καὶ ῥήματα ταῦτόν τοῦτο ποιεῖν, and adds: εἰ δὲ ῥήματα καὶ ὀνόματα ἔστιν οὕτω τιθέναι, ἀνάγκη καὶ λόγους· λόγοι γάρ πού, ὥς ἐγῶμαι, ἢ τούτων ξύνθεσις ἔστιν. That the adjective is regarded as predicable because it is generally descriptive is clear from another passage in the *Cratylus*, in which he says (p. 399 B), that we change *Διὶ φίλος* into *Δίφιλος*, ἵνα ἀντὶ ῥήματος ὄνομα ἡμῖν γένηται: for *Δίφιλος* is properly a subject, and *Διὶ φίλος* is calculated to be a predicate. Some logicians according to Plutarch (*Quæst. Platon.* p. 108) substituted *κατηγόρημα*—"predicable"—for ῥήμα, in this division of the λόγος, or logical proposition, into its distinct parts. Did Plato make this division, he asks, ὅτι πρῶτον λόγον οἱ παλαιοί, τὴν τότε καλουμένην πρότασιν, νῦν δὲ ἀξίωμα, προσηγόρευον, ὃ πρῶτον λέγοντες ἀληθεύουσιν ἢ ψεύδονται; τοῦτο δὲ ἐξ ὀνόματος καὶ ῥήματος συνέστηκεν; ὦν τὸ μὲν πᾶσι οἱ διαλεκτικοί, τὸ δὲ κατηγόρημα καλοῦσιν. That this Platonic analysis of the sentence into its two main elements, the subject and predicate, was accepted as a sufficient classification of the parts of speech, is distinctly stated by the Pseudo-Apuleius (*de dogmate Platónico*, Lib. III. 267): "Ceterum est propositio, ut ait in *Theæteto* [Sophista] Plato, duabus paucissimis orationis partibus constans nomine et verbo, ut: *Apuleius* disserit, quod aut verum aut falsum est, et ideo propositio. Unde quidam rati sunt has duas solas orationis partes esse, quod ex his solis fieri possit perfecta oratio, id est quod abunde sententiam comprehendant—Porro ex duabus prædictis partibus altera subjectiva nominatur velut sub-

dita, ut *Apuleius*; altera declarativa ut: *Disserit vel Non disserit*, declarat enim quid faciat *Apuleius*."

125 Aristotle, following in the steps of his master, adopted the same division of the parts of a sentence. He says (*de Interpretatione*, c. 1—5): *πρῶτον δεῖ θέσθαι τί ὄνομα καὶ τί ῥῆμα, ἔπειτα τί ἐστὶν ἀπόφασις καὶ κατὰφασις καὶ ἀπόφανσις καὶ λόγος*—τὰ μὲν οὖν ὀνόματα αὐτὰ καὶ τὰ ῥήματα ἔοικε τῷ ἄνεν συνθέσεως καὶ διαιρέσεως νοήματι οἷον τὸ ἄνθρωπος ἢ τὸ λευκόν.—ὄνομα μὲν οὖν ἐστὶ φωνη σημαντικὴ κατὰ συνθήκην ἄνεν χρόνου ἥς μηδὲν μέρος ἐστὶ σημαντικὸν κεχωρισμένον—ῥῆμα δὲ ἐστὶ τὸ προσσημαῖνον χρόνον, οὗ μέρος οὐδὲν σημαίνει χωρὶς, καὶ ἐστὶν αἰεὶ τῶν καθ' ἑτέρου λεγόμενων σημείον—λόγος δὲ ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἥς τῶν μερῶν τι σημαντικόν ἐστὶ κεχωρισμένον ὡς φάσις, ἀλλ' οὐχ ὡς κατὰφασις ἢ ἀπόφασις—ἔστι δὲ εἷς πρῶτος λόγος ἀποφαντικὸς κατὰφασις, εἴτα ἀπόφασις· οἱ δὲ ἄλλοι πάντες συνδέσμων εἷς. Here again it is clear that λόγος is the logical proposition, ὄνομα the subject, and ῥῆμα the predicate—"the sign of things predicated of another thing;"—and that the ῥῆμα includes adjectives as well as verbs, appears, as well from this place in which λευκόν is given as an instance of a ῥῆμα, as from another passage in the same treatise (c. 14): *μετατιθέμενα τὰ ὀνόματα καὶ τὰ ῥήματα ταὐτὸν σημαίνει, οἷον ἐστὶ λευκὸς ἄνθρωπος, ἐστὶν ἄνθρωπος λευκός*. The ῥῆμα is a predicate broken off from an actual sentence, and it is only in this opposition that it gets its distinctive name: otherwise it is merely an ὄνομα as Aristotle says (*de Interpret.* c. 3): *αὐτὰ μὲν οὖν καθ' ἑαυτὰ λεγόμενα τὰ ῥήματα ὀνοματὰ ἐστὶ**. The philosopher has ex-

* This passage alone is sufficient to justify Ammonius from the criticisms of Mr. Mansel, who says (in an article which he has elsewhere acknowledged, *North British Review*, Vol. xiv. p. 53): "Ammonius, commenting on *De Interpretatione*, chap. 1, supposes that Aristotle includes under the name of *verb* an adjective in the predicate of the proposition, *i. e.* the mere expression of an attribute without assertion; and this has led Harris to speak of the 'verb in its most comprehensive signification, as including not only verbs properly so called, but participles and adjectives.' But the explanation is erroneous. The ῥῆμα of Aristotle has one uniform signification, that of a combination of attribute and assertion—the predicate and copula united. In the passage misunderstood by Ammonius, the word λευκόν is, by a common idiom, put for λευκόν ἐστὶ." With all his acuteness Mr. Mansel has failed to observe that, according to the Greek writers on logic and grammar, the ῥῆμα has no predicative value except in the *συμπλοκή* with the ὄνομα as subject; and the use of the definite article, which limits the latter, enabled the Greeks to dispense with the copula whenever the predicable word was sufficiently distributed; especially in the case of those expressions which were calculated of themselves to be used as adverbs or secondary predicates.

plained his meaning with regard to the predicate more fully in his treatise on the Categories: as this little work has never been properly understood*, it will be as well to point out its object. It commences by distinguishing *homonyms*, *synonyms*, and *paronyms*. Two things are synonymous when they agree not only in name but also in nature, as when we say that a man and a horse are both animals; but they are homonymous when they agree in name only, as one might say that a horse and the picture of a horse were both animals, and that the man who painted the latter was an animal-painter, although the real definition of the horse and its picture would not coincide. Hence Aristotle speaks of τὰ ἀπὸ τύχης ὁμώνυμα (*Eth. Nic.* i, 6, § 12), when words are used in an equivocal or ambiguous sense, or when there is merely an accidental coincidence in nomenclature, as when the word κλεῖς is used ὁμωνύμως to denote either the clavicular bone in animals, or that with which we lock doors (*Eth. Nic.* v, 1, § 7). On the other hand he says (*Ibid.* v, 2, § 6) that there is a particular kind of injustice distinct from injustice in general, but having the same name, because it falls under the same genus (συνώνυμος, ὅτι ὁ ὀρισμὸς ἐν τῷ αἰτῷ γένει). Words are paronymous when they differ only in inflexion: thus "courageous" is a paronym of "courage." Aristotle proceeds: "Some words are spoken in connexion (κατὰ συμπλοκὴν); others separately. Examples of the former case are—ἄνθρωπος τρέχει, ἄνθρωπος νικᾷ: of the latter, ἄνθρωπος, βοῦς, τρέχει, νικᾷ." After distinguishing between those things that are said of, and those things that exist in, a subject (τὸ ὁποκείμενον), and particularly asserting that individuals (τὰ ἄτομα) cannot be said of a subject, he (c. 4) enumerates ten classes of those words which are spoken separately; they are thus described: τῶν κατὰ μηδεμίαν συμπλοκὴν λεγομένων ἕκαστον ἥτοι οὐσίαν σημαίνει ἢ πόσον ἢ ποιὸν ἢ πρὸς τι ἢ κείσθαι ἢ ἔχειν ἢ ποιεῖν ἢ πάσχειν. ἔστι δὲ οὐσία μὲν ὡς τύψω εἰπεῖν οἶον ἄνθρωπος, ἵππος· πόσον δὲ οἶον δίπληξυ, τρίπληξυ· ποιὸν δὲ οἶον λευκόν, γραμματικόν· πρὸς τι δὲ οἶον διπλάσιον. ἥμισυ, μείζον· ποῦ δὲ οἶον ἐν Δυκίῳ, ἐν Ἀργεῶ· ποτὲ δὲ οἶον ἐχθές, πέρυσιν· κείσθαι δὲ οἶον ἐνέκειται, κείσθεται· ἔχειν δὲ οἶον ὑποδέχεται, ὥπλισται· ποιεῖν δὲ οἶον τέμνει, κτείνει· πάσχειν δὲ οἶον τέμνεται, καίεται. ἕκαστον δὲ τῶν εἰρημένων αὐτὸ μὲν κατ' αὐτὸ ἐν οὐδεμιᾷ καταφάσει λέγεται ἢ ἀποφάσει, τῇ δὲ πρὸς ἄλλα τούτων συμπλοκῇ καταφάσις ἢ ἀπόφασις γίγνεται. Now it is sufficiently obvious from these last words, that the ten sorts of words thus described do not mean predicates, but simply the diffe-

* Since the above was first published the Categories have been fully discussed by Dr. Adolph Trendelenburg, in his *Geschichte der Kategorienlehre*, Berlin, 1846, p. 384. His conclusions are not materially different from those given in the text, but he has gone into all the details of the subject.

rent parts of a sentence, whether subject or predicate; for it is by the joining of these with one another, that the sentence, whether affirmative or negative, is to be formed*. Aristotle institutes a more particular examination of the first four, which have descended to us from the scholastic philosophy under the names *substance* (or *quiddity*), *quantity*, *quality*, and *relation*: the other six he has hardly illustrated at all. If we take a general view of these categories, according to the instances which Aristotle has given, we shall see that this is merely a grammatical or rather syntactical arrangement of certain parts of speech: the first category includes nouns substantive, the three next, different sorts of adjectives, the fifth and sixth, adverbs of place and time, and the last four, verbs, considered as active (9th), passive (10th), intransitive (7th), and in the perfect tense, or as representing the effect of something which has been done or has occurred (8th); the Greek perfect cannot be considered as denoting merely past time, which is included in the fifth category. This is of course a very rude approximation to a scientific division, the number ten being in all probability borrowed from a similar classification among the Pythagoreans. The object of the philosopher in enumerating these classes is shown by his subsequent explanation: these ten sorts of words do not in themselves constitute either an *ὄνομα* or *ῥῆμα* as distinguished from one another, but only when they can be considered as general terms; for instance, it is only as a synonym that substance can become a predicate; in other words, the *πρώται οὐσίαι* or individuals cannot be predicated, but only the *δεύτεραι οὐσίαι*, or *genus* and *species*; thus he says: *τα εἶδη καὶ τὰ γένη μόνα δηλοῖ τὴν πρώτην οὐσίαν τῶν κατηγορουμένων*, and *ὑπάρχει ταῖς οὐσίαις καὶ ταῖς διαφοραῖς τὸ πάντα συνωνύμως ἀπ' αὐτῶν λέγεσθαι*. *πᾶσαι γὰρ αἱ ἀπ' αὐτῶν κατηγορίαι ἦτοι κατὰ τῶν ἀτόμων κατηγοροῦνται ἢ κατὰ τῶν εἰδῶν*. *ἀπὸ μὲν γὰρ τῆς πρώτης οὐσίας οὐδεμία ἐστὶ κατηγορία*. *κατ' οὐδενὸς γὰρ ὑποκειμένου λέγεται*. *τῶν δὲ δευτέρων οὐσιῶν τὸ μὲν εἶδος κατὰ τοῦ ἀτόμου κατηγορεῖται, τὸ δὲ γένος καὶ κατὰ τοῦ εἶδους καὶ κατὰ τοῦ ἀτόμου*, and similarly of the differences (*διαφοραί*): *ὥστε πάντα τὸ ἀπὸ τῶν οὐσιῶν*

* Dr. Trendelenburg, u. s. p. 19, seems inclined to refer the first category or substance to the *subject*, the others to the *predicate*. It appears from the important passage from the *Analyt. Post.* i. 22, p. 83, a, 1, which he quotes in p. 15, that the word *κατηγορεῖν* did not in Aristotle's sense truly and properly apply to any predications except those contained in general, abstract, and distributable words. Thus it is a true *κατηγορία* to say, *τὸ ξύλον ἐστὶ λευκόν*, but *τὸ λευκόν ἐστὶ ξύλον* is either *μηδαμῶς κατηγορεῖν* or *κατηγορεῖν μὲν μὴ ἀπλῶς, κατὰ συμβεβηκός δὲ κατηγορεῖν*. But this does not prevent substance from being predicable in the abstract: thus *ὁ Σωκράτης ἦν ἄνθρωπος* is as good a proposition as *ὁ ἄνθρωπος ἦν σοφός*.

καὶ τὰ ἀπὸ τῶν διαφορῶν συνωνύμως λέγεται (*Categ.* 5). Hence, *κατηγορία* is elsewhere used by Aristotle to signify *genus*, even as distinguished from *species*; thus he says (*de Partibus Animalium*, i. c. 1, p. 639, l. 29): ἕτερα δὲ ἴσως ἐστὶν οἷς συμβαίνει τὴν μὲν κατηγορίαν ἔχειν τὴν αὐτὴν, διαφέρειν δὲ τῇ κατ' εἶδος διαφορᾷ, οἷον ἡ τῶν ζώων πορεία· οὐ γὰρ φαίνεται μία τῷ εἶδει· διαφέρει γὰρ πτήσις καὶ νεῦσις καὶ βάδισις καὶ ἔρψις. And the *categorēmata* or predicables, as supplementary to and descriptive of the categories or predicaments, are the universals: ὄρος, γένος, εἶδος, διαφορά, ἴδιον καὶ συμβεβηκός (*Topica*, i. c. 6). So then Aristotle's treatise on the categories is a first attempt to consider which of the words that appear in a simple sentence (*λόγος*) may form the predicate or ῥῆμα of that sentence, and neither he nor Plato meant to say that ὄνομα and ῥῆμα were parts of speech in the etymological sense, nor had they any other object than to lay the foundations of a system of logic, which of course depends on the syntax of individual propositions. We must, therefore, be careful to distinguish from this logical division of the simple sentence, the distribution of words into the parts of speech, also commenced by Aristotle, and completed by the Stoics and later grammarians. This distinction is pointed out by Plato and Aristotle themselves in their discrimination of *λόγος* and *λέξις*. The former is a logical sentence, the ὄνομα and ῥῆμα,—κατὰ συμπλοκὴν; the latter is the whole outward form of language, whether expressed by articulate sounds or in writing; or, to use the words of Ammonius Hermias (on Aristotle *de Interpret.* p. 99 Brandis): λόγου μὲν οὖν ταῦτα (the parts of speech as they are called) οὐ μέρη, λέξεως δὲ μέρη ἧς καὶ ὁ λόγος αὐτὸς μέρος. καθάπερ ἐν τοῖς περὶ Ποιητικῆς (c. 20) εἴρηται. διαφέρει δὲ ὁ λόγος τῆς λέξεως, ὅτι ὁ μὲν ἐστὶ πλήρωμα προηγουμένως τῶν σημαινουσῶν τὰ πράγματα φωνῶν, ἡ δὲ πασῶν τῶν παραλαμβανομένων εἰς τὴν διαλεκτικὴν. ἔχεις δὲ τοῦ λόγου τὴν πρὸς τὴν λέξιν διαφορὰν καὶ ὑπὸ Πλάτωνος ἐν τῷ τρίτῳ τῆς Πολιτείας παραδεδομένην (p. 392 c) ἐν οἷς φησί “τὰ μὲν δὴ λόγων περὶ ἐχέτω τέλος, τὸ δὲ λέξεως, ὥς ἐγῶμαι, μετὰ τοῦτο σκεπτέον, καὶ ἡμῖν ἅ τε λεκτέον καὶ ὥς λεκτέον παντελῶς ἐσκέψεται.” δι' ὧν δηλὸς ἐστὶ λόγον μὲν τὴν διάνοιαν καλῶν, λέξιν δὲ τὴν ἀπαγγελίαν. This also appears from the words of Plato (*Politicus*, p. 277 c): γραφῆς δὲ καὶ ξυμπάσης χειρουργίας λέξει καὶ λόγῳ δηλοῦν πᾶν ζῶον μᾶλλον τρέπει τοῖς δυναμένοις ἐπεσθαι. In the passage of the *Poetics*, referred to by Ammonius, Aristotle, if he has not been interpolated here (see Ritter, pp. 221 sqq.), divides *λέξις* into the following parts; the letter (*στοιχεῖον*), the syllable (*συλλαβή*), the conjunction (*σύνδεσμος*), the noun (*ὄνομα*), the verb (*ῥῆμα*), the article (*ἄρθρον*), the inflexion (*πτῶσις*), and the sentence (*λόγος*). From the explanations

which follow, it appears that noun and verb are here used in the modern signification, that λόγος does not here mean a logical sentence only (οὐ γὰρ ἅπας λόγος ἐκ δημάτων σύγκειται), but any set of words, a definition for instance (οἶον δ τοῦ ἀνθρώπου ὁρισμός), and that πτώσις does not mean merely the case of a noun, but any inflexion of a noun or verb. For instance, the distinctions of words noticed by Protagoras were only inflexions or πτώσεις*. It is clear that the only parts of speech, according to the meaning which we attach to the term, here mentioned by the philosopher, are the noun, article, conjunction, and verb; and Anaximenes (if Spengel has rightly attributed the treatise to him) specially mentions the three former in the so-called *Rhetorica ad Alexandrum* (c. 25). Now it is stated by Dionysius of Halicarnassus (*de Compositione Verborum*, c. 2, *de Demosthenis Præstantia*, p. 1101, Reiske) and Quintilian (i. 4, § 18), that Theodectes and Aristotle acknowledged only three parts of speech, the verb, the noun, and the conjunction; and that the article was subsequently added by the Stoics. It appears then that Quintilian, and Dionysius, whom he copies in this place, paid attention only to the passage of the *de Interpretatione* quoted above, in which it is said that the logical sentence consists merely of ὄνομα and ῥήμα, and that the different propositions are united by means of the conjunction (σύνδεσμος), so that they also have taken merely the logical division. The separation of the article is also due entirely to its logical importance in the Greek language; every Greek word, however general, may be rendered by the article so individual and definite, as to be adapted to form the subject of a proposition: in fact, the whole distinction between the subject and predicate in many cases is, that the former has, and the latter wants, the article. But, although Aristotle felt this importance of the article, he does not appear to have said any where that it was a part of the λόγος, and therefore Dionysius and Quintilian are right in attributing its addition to the Stoics, if, as we suppose, they were speaking of the logical division.

126 We have stated thus minutely the origin of the syntactical parts of speech, because it has not been pointed out before, so far as we know, and in order that our readers may more easily detect the fallacy, by which Horne Tooke has, perhaps designedly, built up his whole system of etymology on this syntactical distribution of language. The resolution of the sentence into subject and predicate, or, what generally comes to the same thing in Greek, into the noun and

* He is said to have been the first to distinguish the different moods of verbs (Aristot. *Poet.* c. 21; Quintil. iii. 3, § 10; Diogen. Laert. ix. 53; Suidas, *Πρωταγόρας*) and the genders (Aristot. *Rhet.* iii. 5, § 5), for which last he is ridiculed by Aristophanes, *Nub.* 656 foll.

the verb, was undoubtedly of great importance at the time when it was first effected: it was the beginning of a syntactical analysis of language, when etymology, or the doctrine of the matter and form of language, was not and could not be in existence. But to make this arrangement the basis of etymology, and to derive the elements of the word from the elements of the sentence, is a mode of proceeding which can only lead to error and confusion. What then shall we say of a modern philologist, who not only reproduces this old logical division of the parts of speech, applying, however, to the words *ὄνομα* and *ῥῆμα* the limited signification of noun and verb, which they had only as a part of *λέξις* in the method of Aristotle, but has even made this division the basis of a system of etymology, virtually supposing that language was formed according to that system of logic, which only the mighty genius of Plato and the unfailing subtlety of Aristotle succeeded in extracting from the clearest and most syntactical language ever spoken by man? And this is just what Horne Tooke has done. His system of ultra-nominalism rests upon the hypothesis, which his contemporaries incautiously allowed, that the two primary sorts of words, from which all others are derived, were the nouns and the verbs. "In English and in all languages," says he (Vol. I. p. 45), "there are only *two* sorts of words which are *necessary* for the communication of our thoughts; and they are (1) Noun and (2) Verb. In the strict sense of the term, no doubt both the necessary words and the abbreviations are all of them parts of speech; because they are all useful in language, and each has a different manner of signification. But I think it of great consequence both to knowledge and to languages, to keep the words employed for the different purposes of speech as distinct as possible. And therefore I am inclined to allow that rank only to the necessary words: and to include all the others (which are not *necessary* to speech, but merely substitutes of the first sort) under the title of *abbreviations*." Proceeding from this assumption, he has not hesitated to derive all the indeclinable words, whether conjunctions, prepositions, or adverbs, from nouns or verbs, and thus contrived to disguise the few remains of etymological structures in our language*. As the best answer to an erroneous system is a plain statement of the antagonistic truths, and as this is the final object of the present work in reference to the English representative of the Heracleitean school, we will simply offer our shield to those who

* It is right to mention, that most writers on philology before comparative grammar was brought to its present state of perfection fell into the same error of taking a logical view of etymology, but we select Horne Tooke as an object of animadversion, because his book is designedly wrong, and actually pernicious.

dread the power of the *ἔπεα πτερόεντα*†; and will here take our leave of this celebrated piece of sophistry, with the remark that, although it contains some very happy explanations of English words, and some very ingenious argumentations, written in a lively and attractive style, it should never be opened by any one who has not sufficient philological knowledge to guard him from the errors into which it will inevitably lead the ignorant or unwary.

127 The logical or syntactical distribution of words was, as we have already stated, made the basis of that division of the parts of speech which has been adopted for practical convenience in learning particular languages, according to which it varies. In the case of the Greek language the usual arrangement is as follows:

- 1 Noun, { Substantive.
Adjective.
- 2 Pronoun, including the Article.
- 3 Verb, with which is connected,
- 4 Participle.
- These are all capable of inflexion.
- 5 Adverb.
- 6 Preposition.
- 7 Conjunction.
- 8 Interjection.

These are not inflected, and are generally called particles.

† There can be little doubt that in taking this title for his book, Horne Tooke merely meant to imply that the wings of Mercury, or our haste in expressing our meaning, occasioned those abbreviations to which he traces all the corruptions of language—consequently, by *ἔπεα πτερόεντα* he understands merely “hurried or hastily uttered words.” It is, however, worth while to remark that here, as elsewhere, he is in error; for the metaphor in the epithet *πτερόεντα* it borrowed from the *winged* arrows, to which words are so often compared in ancient writers; and, in spite of the joke, it may be truly said, that he has robbed the phrase of its point. See Pindar, *O.* ix. 11: *πτερόεντα δ' ἔει γλυνὼν Πυθιάναδ' διστόν* (cf. Soph. *Phil.* 166: *πτανοῖς ἰοῖς*). *N.* ix. 55: *ἀκοντίζων σκοποῦ ἄγχιστα Μοῦσᾶν*, and the note on *O.* vi. 82. In the application of the epithet ‘winged’ to the arrow itself, there was a sort of metaphor or quasi-personification: see Æschyl. *Eumen.* 181: *μὴ καὶ λαβοῦσα πτηνὸν ἀρηστήν ὄφιν, χρυσεῖόν τε θόμυγος ἐξορμώμενον*. And so lightning is not only the dart of Jove (*βέλος κεραυνοῦ, πυρπάλαιμον βέλος*), but is represented as furnished with eagle wings (see the coins from Elis, in Brönsted’s *Voyages dans la Grèce*, i. Livr. p. 112): and from this figure the spread eagle of modern heraldry is obviously derived. By a further personification, the Eagle itself, as *Ζεὺς ἄγγελος*, is the bearer of the thunderbolt; and it is well known that the Semitic poets passed in a similar manner from the powers of nature to an army of *Mal' hâkîm*. This transition is shown even by the form of the word: “neque enim ullum nomen, cui *Mem* præfixum est, vim personæ innatam habet, sed per translationem abstracti in concretum mutatur” (Fürst, *Concord.* p. 581).

The old grammarians adopted this arrangement, with the exception, that they classed the interjection with the adverb and made the article a distinct part of speech (*Dionys. Thr. Bekk. Anecd.* p. 634). For the purpose of learning a language, the syntax of which is logical and for the most part well understood, this arrangement is highly convenient, and from its constant adoption the ear has become so familiar with it, that its nomenclature can hardly be banished even from etymology, with which it has no concern. We, therefore, retain the names of these eight parts of speech, though, to avoid confusion, we render them subordinate to the real etymological division of words, which we have already mentioned, and which we now more formally set forth.

128 In the Indo-Germanic languages, all words may be comprised in two general classes; the PRONOUNS, or those words which indicate *space* or *position*; and the WORDS CONTAINING ROOTS, which express the positional relations of general attributes. The former are words, declinable or indeclinable as the case may be, without any admixture with the other element of language. The latter require the addition of at least one pronominal suffix to make them words. It is for this reason that we term the PRONOUNS or positional words, the *organizing*, *constituent*, or *formative* element of inflected language, and the ROOTS the *material* element. By pronominal additions of a perfectly analogous nature, the same root becomes either a NOUN or a VERB, that is, it expresses either a thing, or an acting, or result of acting. The only etymological difference between the noun and the verb is this—that the pronominal suffixes, which mark the inflexions of the noun, are fixed or adverbial, while those which mark the persons of the verb are themselves capable of inflexion. When they lose this independent power of inflexion they become intermediate affixes, and the crude verb is then capable of receiving a set of case-inflexions, so that it becomes a noun. This sort of noun is called a *participle*. We cannot, therefore, consider the noun and verb as, etymologically, different parts of speech, but, on account of their prominent importance in the syntactical scheme, we have in the following pages classed them under separate heads; which arrangement is farther justified by the fact, that in the case of the verb the idea of space has developed itself into the idea of time. That the formative

element of language is prior to the material, appears from what we have just mentioned,—that the pronoun is a word without extrinsic addition; but the noun and verb are such only by the addition of pronominal element. It also appears from psychological considerations. Every thing is conceived as happening in space or time, the idea of space being however antecedent to, and the parent of, that of time. The first conception about any thing is that it has a position, that it is somewhere without us, and, as it is our conceptions that we express in words, the first words must be those which indicate position, that is, pronouns*. The next conception with regard to the particular object, is of some particular quality with which sensation has invested it, and this quality of course gives it a name according to a sort of *primâ facie* classification. But still it is *somewhere*, and therefore the pronoun is tacked on to the end of it, in order to constitute it a word: the same would be the case, though in a more obvious manner, when the thing conceived was not a quality but an action.

That, in the Greek language in particular, all words may be resolved into and deduced from these elements, will be abundantly shown in the following pages. As we use the word “pronoun” or “pronominal” in a sense somewhat wider than that which it generally bears, it will be as well to give comparative tables of the etymological and ordinary arrangements of the parts of speech.

Etymological.		Syntactical.	
Formative element or Pronoun,	{	Preposition,	
		Conjunction,	
Material element combined with Pronoun,	{	Noun,	{
		Adjective,	{
		Substantive,	{
		Participle,	{
		Verb,	{
		Verb.	

* W. Humboldt, though he admits that the pronoun is an original element of language, says very emphatically: “according to my most profound conviction, any attempt to define the chronological sequence of the essential elements of speech, is a chimera (*ein Unding*)” (*über d. Verwandsch. d. Ortsadverbien mit dem Pronomen*, 1830, p. 3).

The interjection is either an unmeaning cry, a residuary pronoun, or the vocative case of a noun*: the adverbs are generally pronominal words, but some of them are merely cases of nouns. The numerals are adjectives in syntax, though etymologically pronouns.

* A writer in the *Proceedings of the Philological Society*, III. No. 72, p. 211, says: "Interjections had originally a distinct meaning and distinct origin," and by way of proving this, he derives *eja* from *audin!* Of course, he never heard of the Greek *εἶα*, and he is prepared, we presume, to find a new parentage for *ejulare*. As the writer in question is the only person in this country, who is styled *Professor of Comparative Grammar*, he might perhaps have been expected to inform himself of the fact, that the change of *aud-* into *ed-*, or rather *æd-*, could only occur in a compound, like *ob-ædio*; and even in this word the later writers seem to have preferred *ob-audio*. Experience teaches us that those who have neither the industry to *learn* nor the sagacity to *discover* the truth, have often the courage to *invent*, and that there are no limits to the extravagance of perverted ingenuity.

BOOK II.

PRONOMINAL WORDS.



THE NEW CRATYLUS.

BOOK II.

PRONOMINAL WORDS.

CHAPTER I.

THE PERSONAL AND OTHER PRONOUNS.

129 Ultimate analysis of pronominal words discovered by Bopp. 130 Principles of arrangement and classification of the pronominal elements first suggested by the present Author. 131 General view of the pronominal combinations in the Greek Language. 132 Objective cases of the three personal pronouns. 133 Nominatives of the first and second pronouns. 134 Lengthened forms of the objective cases, supplied by Bentley's view of the Homeric possessive. 135 Demonstrative force of first and second personal pronouns. 136 Plural and dual forms of the first and second pronouns. 137 The nominative, masculine and feminine, of the third personal pronoun. 138 The combinations $\alpha\upsilon\text{-}\tau\acute{o}\varsigma$ and $ο\upsilon\text{-}\tau\acute{o}\varsigma$. 139 The nominative $\epsilon\acute{\iota}$ and its affinities. 140 Demonstrative use of the Greek reflexive; 141 Its confusion of number and gender; 142 Its vague application to different persons. 143 Identity of $\sigma\phi\acute{\epsilon}$ and ξ . 144 Doric inversions $\psi\acute{\epsilon}$, $\psi\acute{\iota}\nu$. 145 Indefinite, interrogative, and relative pronouns all referable to the second element: 146 Their forms in Latin; 147 In Sanscrit. 148 Connexion of the relative and demonstrative in Greek. 149 Guttural origin of $\tau\iota\varsigma$. 150 Demonstrative use of the guttural pronouns. 151 General conclusion respecting the pronouns. 152 Pronominal adjectives.

129 **I**N the Indo-Germanic languages, considered in their most ancient form, we can always resolve the pronouns into the shortest possible words, monosyllables for instance, or even single vowels; but in the latter case we have, of course, derivative forms, for, as we have shown before, no single vowel can exist in the first instance without at least an initial breathing: in fact, the primitive pronouns must have been very simple words, for the first and easiest articulations would naturally be adopted to express the primary intuition of space. These little vocables denote only the immediate relations of locality; and to designate

all the subordinate varieties of position and direction, it is the custom, especially in the Greek language, to join together the different pronouns, or different modifications of the same pronominal stem, till at last we arrive at long words, like $\delta\sigma\text{-}\tau\iota\varsigma\text{-}\delta\eta\text{-}\pi\omicron\text{-}\tau\epsilon$, every syllable of which is a distinct pronoun

The first principles of this ultimate analysis of all pronominal words were discovered by Francis Bopp. In his essay *Ueber den Einfluss der Pronomina auf die Wortbildung* (Berlin, 1832), he remarks (p. 13): "From the dissection of the pronouns and the prepositions connected with them, we get the following monosyllabic stems, partly consisting of a mere vowel, which either occur in Sanscrit only, or are found in the connected European languages with more or less exact correspondence in form: *a, i, u, ê; ka, ki, ku; na, ni, nu; ma, mi, (-mu), mu; ya, yu; va, vi; ta, da, sa.* The compound pronouns—meaning thereby not derivatives like *tâ-vat*, 'so much,' but primitives, which the grammarians consider as simple, but which we have endeavoured to reduce into their real elements—show as their first member, in *Sanscrit*, a stem consisting of a single vowel; they are the following, *a-va, i-va, ê-va, a-na, ê-na, a-da, i-da, ê-ta, ê-ka, ê-sha.*" But, although this analysis was pointed out many years ago, and though the importance of these researches was soon afterwards recognised and explained by Mr. Garnett (*Quarterly Review*, Vol. LVII. p. 80 sqq.; *Essays*, pp. 96 sqq.), no one* has thoroughly examined, compared, and classified these monosyllabic stems and others which Bopp has omitted to mention; we shall therefore endeavour to show which of these pronominal words have a common origin, and thus to arrange them according to their natural coherency. (See below, § 169.)

130 It is reasonable to suppose that the primitive pronouns would be designations of *here* and *there*, of the subject and object as contrasted and opposed to one another. As soon as language becomes a medium of communication between two speaking persons (and it is useless to consider it before it arrives at this point), a threefold distinction at once arises between the

* These words, which appeared in the two former editions, are still applicable.

here or subject, the *there* or object, and the person spoken to, or considered as a subject in himself, though an object in regard to the speaker. We find traces in the Indo-Germanic languages of an application of the first three consonant-sounds belonging to this family of languages, namely, the three *tenués*, to denote these three positions of *here*, *near to the here*, and *there*, or first, second, and third personal pronouns, as they are generally called. These *tenués*, articulated with the usual short vowel, are the three pronominal elements *pa* (found in $\pi\alpha\text{-}\rho\acute{\alpha}$, &c.), *qva* or *ka* (found in $\kappa\acute{\epsilon}$, &c.), and *ta* ($\tau\acute{o}$, &c.). The two former are, however, more usually expressed by the cognate sounds *ma* or *va*, and by *fa* whether the digamma is represented by one or by both of its members (above, § 110). By a similar change of articulation the third element appears as *na*. If now we take the elements enumerated by Bopp, we shall find, that, according to the principles stated in a former chapter, *ma*, *mi*, *mu*, *va*, *vi*, belong to the first of them; *ka*, *ki*, *ku*, *ya*, *yu*, $\acute{e} = \acute{a}i = ya$, *i*, *u*, to the second; and *ta*, *tu*, *ni*, *na*, to the third of the original pronouns. The second also appears under the forms *ga*, *ha*, immediately derived from *qva* or *fa*. The syllables *da*, *tha*, and *sa*, for reasons which will be stated in a subsequent chapter, generally belong to the second pronoun, though the two former would seem to be only slight variations of the element *ta*, and the pronoun *sa* is actually used for the third pronoun when that pronoun denotes a person or subject. From *va*, as a variation of *ma* the first pronominal element, we must carefully distinguish the same syllable when it appears as a mutilation of *fa*, the second element; but there are some cases in which this distinction cannot be made without the most refined etymological analysis. And here we will anticipate what will be stated hereafter more at length. According to the principle mentioned above, any one of these simple elements may be compounded with any one of the others so as to form new modifications of the idea of position. There is, as we shall see, a pronominal element *-la* or *-ra*, derived from *na*, but indicating motion, or conveying the idea of "beyond." When this is added to the first pronominal element, it combines the idea of closeness with that of removal, as in $\pi\alpha\text{-}\rho\acute{\alpha}$, $\pi\epsilon\text{-}\rho\acute{\iota}$, which express motion from or to the side of, and motion close round an object. When with the second, it expresses the third

position as opposed to the second, and *tva-ra*, as we shall see in the following chapter, is equivalent to *ta*, which indicates the third position, i. e. the second position in a state of further removal. On the contrary, by combining the third pronominal element with the first, under the form of *ma*, we obtain a signification of nearness approaching to, or even coinciding with that of the second element: thus *ta-ma*, the suffix of the superlative, expresses the approximation of the end of a series to the speaker, and, conversely, *ma-ta* denotes the approach of the speaker to a distant object*. We shall see in the next chapter that the first three numerals are the primary pronouns under the forms *ma*, *tva*, and *tva-ra*. The elements *va* and *na* are both employed to designate the first person, though always in the dual or plural number. They are also used to convey the strongest signification of the demonstrative pronoun, that of distance or separation. This coincidence in meaning between the first pronominal element under the form *ma*, *va*, with the third personal pronoun *na*, is explicable psychologically, from the fact that the ideas of self, unity, separation, distance, solitude, and negation, all spring from a common source. The element *na* is an emphatic expression of the *there*, or distance; *ma*, &c. of the *here* or self as a separate individuality. Hence, the strongest predication of self in these languages is, in Sanscrit and Latin, *a-ha-m*, *e-go-met*, "that which is here," but in Greek *ἐ-γώ-νῃ*, "that which is by itself or separate." The apparent coincidence of *va* and *na*, as expressive of negation, is found only in the longer forms *a-va* or *a-u*, and *a-na* or *a-n*, ultimately represented by *a-* or even *e-*. But we hope to show in the following pages that *na* or *ana* is actually prefixed to *va* when the compound *a-va* or *a-pa* bears the negative signification.

131 We have thus stated beforehand the results of our analysis of the pronominal words, in order that the student may be provided with a general map of the country which he is about to survey, and, knowing what to look for, may not be confused by the multiplicity of details. We now proceed to examine

* The student will find these principles categorically set forth and illustrated in our *Greek Grammar*, articles 63—79, 356, 357.

each of the pronouns more minutely, taking them in the order in which they appear in the common grammars, and beginning in each case with the existing classical form, and so ascending to its primary state.

It will be found that our analysis has conducted us to the following general results.

(1) All pronouns are demonstrative, or indicative of particular position in space. Accordingly, in their original application, there could not have been those distinctions between the personal, demonstrative, and relative pronouns, which are of so much importance in syntax*.

(2) The elements of these positional words very rarely occur in their simple and unaffected state; for the craving after an exact definition of locality, which necessitated their employment in the first instance, has generally led to the superaddition of other distinctive syllables. Consequently, in the forms of language, as they appear to us, it will very often be found that the shortest pronominal words or affixes are not the primitive types in the particular instances, but are mutilated relics, which an accurate investigation will often enable us to restore to their original completeness.

(3) As distinct words the pronominal elements appear in the form of demonstrative substitutes for the noun, or of numerals, with the corresponding adjectives in either case, and also as prepositions and other particles.

(4) As part of the formative machinery of language, the pronominal elements appear regularly in the case-endings of the noun and in the person-endings of the verb, and variably in the termination of the crude-form of the noun, and as the extension of the root in the verbal-derivative. The person-endings are merely certain functions of the objective cases of personal pronouns, and the cases are connected with a special development of the second and third elements. In the derivative forms we find the converse. Those from nouns use all three pronominal elements, in their distinctive senses, and in combination

* The student will find in the *Greek Grammar*, articles 229, 408 sqq. the proper discrimination of all the Greek pronouns according to their syntactical use.

with one another: while the verbal derivatives are limited to that special development of the second and third elements, which we find in the cases of the noun.

132 The objective cases of pronouns, as well as of nouns, are always older than the subjective. This appears from the fact that there are many nouns which have no subjective case (for instance, all neuter nouns), but no one, so far as we know, which has the nominative only. It might also be inferred, from *à priori* considerations, that it must be so. All things are to us parts of an external world, and must needs be spoken of as such long before the mind of man can invest the *not-me* with the powers of agency and will, which we experience in ourselves. We feel that even the spot on which we stand, and which is for the moment identified with our description, for we are *the here*, is nevertheless a *not-me*, and is spoken of as something without, as an object, and therefore must continue to be called one till language begins to assume a logical structure.

The common forms of the objective or accusative cases of the personal pronouns, in Sanscrit, Greek, Latin and Gothic, are as follows:

	Sanscrit.	Greek.	Latin.	Gothic.
1st person	<i>mām, mā</i>	<i>με</i>	<i>mē</i>	<i>mik</i>
2nd	<i>tvām, tvā</i>	<i>σε</i>	<i>tē</i>	<i>thuk</i>
3rd	<i>tam</i>	<i>τα</i>	<i>tum</i>	<i>thana</i>

The Cretans appear to have said $\tau\mathcal{F}\epsilon$ instead of $\sigma\epsilon$, as may be inferred from the following glosses of Hesychius: $\tau\acute{\epsilon}\omicron\omicron$. σοῦ. Κοῖτες.— $\tau\rho\acute{\epsilon}$. σέ. Κοῖτες. Here we should read $\tau\acute{\epsilon}\omicron\mathcal{F}$ for $\tau\acute{\epsilon}\omicron\omicron$, and $\tau\mathcal{F}\acute{\epsilon}$ for $\tau\rho\acute{\epsilon}$, for immediately under the former gloss we have $\tau\acute{\epsilon}\omicron\varsigma$, and $\tau\epsilon\omicron\upsilon\varsigma$. σοῦς—and the resemblance between P and $\mathcal{F}$ might easily cause the mistake. Besides, a labial is manifestly included in the nominative $\tau\acute{\upsilon}$. We shall discuss hereafter this corruption of the second pronominal element $\mathcal{F}\alpha$. The Latin *tum* occurs only in composition or as a particle.

The termination of the objective case of the third person is strictly a case-ending, *i. e.* expressive of a relation of place. But the first element is obviously appended to the first and second pronouns in Sanscrit, and the second element to the same pro-

nouns in Gothic, and, as we shall see presently, in Greek and Latin also. This is a metaphysical rather than a grammatical phenomenon*, and indicates that the *here* or the *near* is implied in the second, no less than in the first personal pronoun.

The ϵ , which, under certain circumstances, is found at the beginning of the Greek $\mu\epsilon$ and the other oblique cases of the first personal pronoun, may be compared with the prosthesis of a vowel in such words as $\acute{\alpha}\nu\omicron\mu\alpha$, $\acute{\alpha}\delta\omicron\upsilon\varsigma$, $\acute{\alpha}\varphi\omicron\upsilon\varsigma$, $\acute{\epsilon}\lambda\alpha\chi\upsilon\varsigma$, by the side of *nāma*, *danta-s*, *bhrû-s*, *laghu-s*. We find it also in $\epsilon\kappa\epsilon\upsilon\nu\omicron\varsigma$ compared with $\kappa\epsilon\upsilon\nu\omicron\varsigma$. There is no reason to doubt that it is the residuum of a pronominal element, and most probably, like the verbal augment, it represents the evanescent *-v*, when it is followed by a guttural, but stands for *f* or one of its constituent parts, when the following syllable begins with a nasal or dental sound.

These forms, then, of the objective cases of the personal pronouns are identical in the four languages compared above: this identity they also maintain as the personal endings of the oldest class of verbs in Sanscrit, Greek, and Latin; but then, as we shall show hereafter, the vowel is generally subjected to certain changes which we shall discuss in the proper place.

133 In the nominative also, the resemblances of the first two, though not so striking, are sufficiently certain.

	Sanscrit.	Greek.	Latin.	Gothic.
1st person	<i>aḥam</i>	$\acute{\epsilon}\gamma\omega\nu$	<i>ego</i>	<i>ik</i>
2nd	<i>tvam</i>	$\tau\omicron\upsilon\nu\ddagger$	<i>tu</i>	<i>thu</i>

It is worthy of remark, that although the nominative of the first personal pronoun is distinguished in every language of the Indo-Germanic family by an initial vowel, whereas the objective case invariably commences with the characteristic *m*, the nominative of the second pronoun manifestly contains the same

* Grimm (*Gesch. d. deutsch. Spr.* i. p. 262) seems to write rather confusedly on this point.

† The word $\tau\acute{\epsilon}\nu$ (and in the vocative $\acute{\alpha}\tau\acute{\epsilon}\nu$, "O you,") is an old form of $\tau\omicron\upsilon\nu$ (Buttmann, *Ausführl. Sprachl.* § 57, *Anm.* i.), and is strikingly like the Sanscrit *tvam*.

element as its objective case*. From this fact we are entitled to conclude that while the nominative and objective cases of the second pronoun had a common origin, the nominative of the first person was formed independently of its objective case†. This, however, is by no means inexplicable. Even after the adoption of nominative pronouns the person spoken to would still continue to be an object, and therefore the nominative and objective cases of that pronoun would contain the same elements; but when the speaker could detach his notion of himself from the idea of space, from the *here*, which before constituted his definition, and consider himself as the *I*, the real subject, he would adopt some word more emphatic than the mere monosyllable *me* to express himself by, and this word was *aham* in Sanscrit, and *ego* in Latin and Greek, by a common transition from the *h* to the *g* (Pott's *Etym. Forsch.* I. p. 144).

If we compare *aha-m*, *tva-m* with *a-ya-m*, "this man," *i-ya-m*, "this woman," *sva-ya-m*, "oneself," *va-ya-m*, "we," *yû-ya-m*, "you," *ma-h-ya-m*, "in me," &c., we must conclude that the termination is simply *m*. The Greek *ἐγών* was written *ἐγαν* by the Æolians, *ἐγώννα* and *ἐγώνη* by the Dorians (Apollonius Dyscolus, *de Pronom.* p. 64 B

* In addition to the four languages adduced in the text, the following have been cited by Grimm (*Gesch. d. deutsch. Spr.* pp. 257, 8).

	Nom.	Object.		Nom.	Object.		Nom.	Object.
Zend	<i>azem</i>	<i>manm</i>	O. Pruss.	<i>as</i>	<i>miën</i>	Osset.	<i>äz</i>	<i>mä</i>
Lithuan.	<i>asz</i>	<i>mane</i>	Slav.	<i>az</i>	<i>mja</i>	O. H. D.	<i>ih</i>	<i>mih</i>
Lett.	<i>es</i>	<i>man</i>	Pol.	<i>ia</i>	<i>mie</i>	A. S.	<i>ic</i>	<i>mec</i>
			Bohem.	<i>'ga</i>	<i>me</i>	Eng.	<i>I</i>	<i>me</i>
						O. N.	<i>ek</i>	<i>mik</i>

† The Professor of Comparative Grammar at the London University College, in a paper which appears in the *Proceedings of the Philological Society*, Vol. IV. No. 78, has the courage to maintain that *I*, *me*, *we*, *us*; that *ego*, *me*, *nos*; and that *ἐγώ*, *νῶϊ*, and *ἡμεῖς*, have all arisen from one common stem. For example, the German nominative *ich* is a mutilation of the corresponding accusative *mich*, and the *h* in *mihi* is the same guttural which appears as *g* in *ego*. But perhaps any thing might be expected from a writer, who derives the composite pronouns *κεῖνος*, &c. from a supposed verb *ken* = "to see" (*Phil. Soc.* III. p. 67)! who tells us that *βαρ* is the radical syllable of *βαίνω* (*Ibid.* II. p. 147)! who connects *dives* with *bigæ* (*Phil. Soc.* 1854, p. 27, cf. *Journ. of Phil.* II. p. 354)! and considers *eja* as another form of *audin*! (above, p. 238).

Bekker). Of the Bœotian *ἰών*, Apollonius writes as follows: *Βοιωτοὶ ἸΩΝ*, ὥς μὲν Τρύφων φήσιν, ὑφέσει εὐλόγῳ τοῦ γ, ἵνα καὶ τὰ τῆς μεταθέσεως τοῦ εἰς ι γένηται, ἐπεὶ φωνήεντος ἐπιφερομένου τοιοῦτον παρακολουθεῖ. ἀλλὰ μὴν καὶ ἐδασύνθη, ἐπεὶ δασύνεται τὰ φωνήεντα ἐν ταῖς ἀντωνυμίαις, ὅτε πρὸ φωνήεντων τίθενται, ἑός, ἐοῦ, ἑαυτῷ, ἑαυτόν, ἑοι. ὥς δὲ ἔνιοι, ὧν καὶ ὁ Ἀβρων, θέμα ἐστὶν ὃ συζύγως οἱ αὐτοὶ φασὶ τῇ μὲν ἐγὼν τὴν ἰών, εἴγε τὸ παρὰ Δωριεῶσιν εἰς ι μεταβάλλεται, τῇ δὲ ἔγωνγα τὴν ἰωνγα. Κόρινθα·

μέμφομαι δὲ καὶ λιγουρὰν Μυρτίδ' ἰωνγα
ὅτι βανὰ* φούσ' † ἔβα Πινδαρίοιο ποτ' ἔριν.

Καὶ ἔτι

ἰωνεὶ ἡδ' ἡρώων ἀρετὰς χειρῶάδων
(read, partly with Sturz, *ἰωνγα οὐδ' ἡρώων ἀρετὰς χεῖρω ἄδω*). In like manner for *σύ* or *τύ*, we find *τύνη*, and the Bœotian forms *τού*, *τούν*, *τούγα* (Apollon. *de Pronom.* p. 69 c); also in the oblique cases the Æolians wrote *ἐμοι*, the Bœotians *ἐμύ*, the Dorians *ἐμῖν* and *ἐμινγα*, and the Tarentines *ἐμῖνη* and *τίνη* (Apollon. *de Pronom.* p. 104 c, and 105 c). In Hesychius too we have *ἐμήνη* (read *ἐμεύνη*), *ἐμοῦ*, and *ἐξεχέμεναι* (read with Hemsterhuis *ἐξεχ' ἐμεύνη*), *χωρὶς ἐμοῦ*, *Λάκωνες*. When we remember that the Dorians wrote *δύων* for *δύο* (Hesychius), that *ἐγώ* appears as *egō* in Latin, that the third person dual was sometimes *-τον*, sometimes *-την* or *-των*; that we have *mē*, *tē*, *sē*, in Latin, and *mām*, *mā*, *tvām*, *tvā* in Sanscrit, by the side of *μέ*, *σέ*, *έ*; also *μήν*, *μή*, *δήν*, *δή*, as well as *μέν*, *μᾶ*, *δέν*, *δέ*, and in the case-endings *-δην*, as well as *-δα*, *-δον*, we shall not be perplexed by the variation in quantity which takes place in these pronouns, and shall

* This word, which is the Bœotian form for *γυνή*, deserves some remark. The following are the notices of the grammarians respecting it. Herodian (*περὶ μόν.* λεξ. p. 18, l. 25): τὸ γὰρ παρὰ Κορίνθῃ βάνα (l. βανὰ) οὐ κοινὸν οὐδὲ εἰς νῆ λῆγον, ἀλλὰ ἴδιον θέμα Βοιωτῶν τασσόμενον ἀντὶ τοῦ γυνή. Hesych. Βάννα (l. βανὰ). γυνή ὑπὸ Βοιωτῶν. Now the Dorians said *γάννα* instead of *γυνή* (Gregor. Corinth. *de Dialecto Dor.* § CLIII.). It is, therefore, obvious that the original form must have commenced with a compound of the guttural and labial, otherwise the two forms are inexplicable. The old word was perhaps *γβάννα* or *φάννα*. This digamma initial is split up in the usual way in the different Indo-Germanic languages. The whole letter is preserved in the old English *quean*, the labial only in the Bœotic *βάννα*, Sanscrit *vanita*, Erse *bean* or *vean*, Welsh *benw*, the guttural only in the Sanscrit *jani*, Erse *gean*, Russian *jena*. In the common Greek *γυνή* the labial is vocalized into *v*, as is the case with *νόων*, *κυνός*, Sanscrit *gvan*, &c. On the probable significance of the words of Corinna, see *History of Greek Literature*, III. p. 446.

† It may be doubted whether this is the Bœotian form for *φῦσα* (*ov* being regularly substituted for *v*, whether long or short, in that dialect), or the participle of the verb *φέω*, supposed to be the old form of *φύω* (see J. H. Voss on Virgil, *Eclog.* I. 49).

perhaps be disposed to recognise, without any hesitation on that account, the identity of the first two syllables of *āhā-m* and *ἐγών-ν*, *ἐγών-ν*. The termination of the former is undoubtedly the element of the first personal pronoun, which appears at greater length in the Latin *ego-met*; the final *-ν*, *-νν* of the latter is a variation of the element *ta*, which we shall frequently have occasion to speak of. The bulk of the pronoun *aha-m* is a compound of the pronominal elements *a*, *ha*, the former being here of demonstrative, the latter of relative import, and the whole signifying "that which," or conveying, with the affix, the meaning "that which is here," while the gloss in Hesychius (*ἐγών, αὐτὸς ἐγώ*) seems exactly to express the meaning of *ἐγών-ν*, i. e. "that which is by itself." We have the same combination in *ἐ-κας*, *ēka-s*, and, with the casual affix *tur* = *-tus*, in *igi-tur*, "from or after that" (see below, § 362). If we may be allowed to state now what we shall prove in the course of the following chapters, the relative element, which here in Sanscrit and generally in Greek appears under the form *ha*, *ō-g*, also assumes (1) the form *γα*, *γε* in Greek, under which it corresponds in meaning to the Sanscrit particle *ha*; (2) the form *quē*, *quī* in Latin, under which it corresponds in meaning to the Greek *γε*, Sanscrit *ha* (*quī-dem* = *γε-δήν*); (3) the form *ka*, *κα*, in Sanscrit and Greek. All these, it will be seen, belong to the second pronominal element, which of itself is capable of expressing the mere relative pronoun, and the cognate signification of the genitive case. In order, however, to give greater emphasis to this sense of proximity, derivation, and relation, it is not unusual to find a reduplication of the second element. As Mr. Garnett has remarked, in his instructive essay on this subject ("On the origin and import of the genitive case," *Phil. Soc.* Vol. II. nr. 39, p. 168; *Essays*, pp. 214 sqq.), we find cases in which, "for the sake of greater precision, the demonstrative element *na* is doubled to form a relative, much as in Norse and Anglo-Saxon: *sa-er*, *se-the* = 'who,' *lit.* 'the-the,' or 'the-that:' the object of this duplication appears to be to establish a more precise connexion between the antecedent and the relative clauses, a portion of the complex expression being referred to each." Although, therefore, the existing import of *a-ha*, *e-go*, &c., may be "that which," there is every reason to believe that we have here the remnant of the reduplication *ha-ha*, the stronger form being retained for the relative expression. This is confirmed, as we have elsewhere shown*, by the analogy of the composite Hebrew relative אֲשֶׁר *'ha-she'r*, compared with the personal pronoun אֲנִי *'ha-nô-ki*, in which the elements of *ἐγών-ν*

* *Maskil le Sopher*, pp. 12, 24.

appear in a different order; and we shall see that the word *Fá-va-ξ* involves a similar combination of pronominal roots. For *a-ha-m* we have *a-da-m* in the Behistun inscription; and there are other instances in which the *d* appears in this inscription as the representative of a Sanscrit *h* (Rawlinson, *As. Soc.* x. 2, p. 114). Moreover, the character itself indicates some connexion with the old Persian digamma which is made up of $\langle$ and $\tilde{\gamma}$ or *d* (above, § 110). We trust to be able to show in the following chapter that the pronominal element *mā* is also one of the representatives of the first numeral in Greek. There is another expression for unity in Sanscrit *ê-kas*, in Greek *ἕ-κας*, in Latin *aquus* (*sēcus*), in Hebrew אֶחָד 'e'hād, both syllables of which represent the second pronominal element. These expressions for unity are, in our opinion, identical with the Greek *ê-γώ*, the Latin *e-go*, and the bulk of the Sanscrit *a-ha-m*. In the Boötian *íw-v* the evanescent guttural is represented by the aspirate, on a principle before explained.

134 With the final letter suppressed, *a-ha* is in Sanscrit "a particle and interjection implying (1) commendation; (2) rejecting, sending; (3) deviation from custom (improperly); (4) certainly, ascertainment" (Wilson's *Sanscr. Dict.* s.v.); and it is interesting to know, that the Latin language has two interjections, *ehem* and *eho*, corresponding to *aham* and *ego* respectively, which convey a meaning very nearly akin to what we conceive to have been the original force of the first personal pronoun: compare such passages as *ehem*, *Demea*, *haud aspexeram te*:—*eho puer, curre ad Bacchidem*. It is not impossible that *eja* and *ěā* may be residuary forms of the same kind. These are not the only instances of the use of the particle *hā* = *Fa* in Latin. It appears to have been the regular suffix of the objective cases of the first pronoun in old Latin. Quintilian says (*Inst. Orat.* i. 5, § 21): *Inde durat ad nos usque VEHEMENTER, et COMPREHENDERE, et MIHI: et MEHE quoque pro ME apud antiquos, tragædiarum præcipue scriptores, in veteribus libris invenimus* (see Lepsius, *Tabb. Eugub.* pp. 92 sqq.). It is not improbable too that the same termination was employed to form the objective, genitive, and dative cases of the first personal pronoun in the oldest Greek. This dative appears generally under the form *μοί* or *ἐμοί*. Bentley, however, perceived that the metre in Homer occasionally required *μεοῦ*, *μεοί*, instead of *ἐμοῦ*, *ἐμοί*, and *μεός* instead of *ἐμός* in the possessive, after the analogy of the Latin *mei*, *mihi*, and *meus*. We give the passages in which he has noticed this, from a MS. in the Library of Trinity College:

Iliad IV. 426. ἦν νῦν ἐφράσσαντο, μεοῦ ἀπομνησίσαντος.

Odys. x. 425. αὐτοὶ δ' ὀτρύνεσθε μεοὶ ἅμα πάντες ἐπεσθαι.

xx. 364. Εὐρύμαχ', οὔτις ἄνωγα μεοὶ πομπῆας ὀπάξειν.

In the two latter passages the editions have ἐμοί, in the first ἐμεῦ. In the following, they have different cases of the possessive ἐμός.

Iliad ix. 412. τέττα, σιωπῇ ἥσο, μεῶ δ' ἐπιπεῖθεο μύθῳ.

ix. 57. ἧ μὴν καὶ νέος ἐσσί, μεδς δέ κε καὶ παῖς εἴης.

xix. 194. δῶρα μεῆς παρὰ νηὸς ἐνεγκέμεν.

xx. 20. ἔγνωσ, Ἐννοσίγαιε, μεῇ ν ἐν στήθεσι βουλήν.

xxiii. 278. πατρὶ μεῶ Πηλεΐδ.

Odys. ix. 459. καδδὲ μεδ ν κηρ

λωφρήσειε κακῶν.

x. 178, and 428; xii. 222. οἱ δ' ὦκα μεοῖς ἐπέεσσι πλίνοντο.

xii. 258. οἴκτιστον δὴ κείνο μεοῖς φίλον ὀφθαλμοῖσι.

397, and xiv. 249. ἐξῆμαρ μὲν ἔπειτα μεοὶ ἐρίηρες ἐταῖροι.

xiii. 305. Φοίκαδ' ὕπασσαν ἴοντι, μεῇ βουλῇ τε νόφ τε.

xxiv. 327. εἰ μὲν δὴ Ὀδυσσεύς γε, μεδς παῖς, ἐνθάδ' ἱκάνεις.

As we have the forms ἐμίω (Ahrens, *dial. Dor.* p. 249) and ἐμέθεν, and even μεθέν in Sophron (ἔτι μεθέν ἅ καρδία παδῇ. *Fr.* 46, ap. *Apoll. de Pron.* 83 c, 98 A), we are not obliged to assume the form μεοῦ, though the analogy of τεοῦ (*Apoll.* 96 B) renders it justifiable. It must be remarked in general that all these case-endings of the pronouns belong to the full development of a language, and are as recent as the case-system of the nouns themselves. For we get beyond the merely distinctive use of the three original elements themselves, as soon as we begin to speak of case-affixes¹, which, as we shall see, are connected with a special development of the second and third elements. The Bœotian ἐμύ for ἐμοί points to an original ἐμεφι, just as τυ represents an original τφε; and with regard to Bentley's assumption of μεοί for ἐμοί, we think the ο in both forms is a substitute for the lost digamma or aspirate, which is otherwise represented in the common suffix -φι, and that μεοί = με-φι = μεφι is fully equivalent to *mi-hi*. The same stem is represented by the *k*, or *ch* appended to the Gothic *mik*, *thuk*, New German *mich*, *dich*; and the long vowel in the Latin *mê*, *tê*, may indicate, as we have seen, an original *me-he*, *te-he*; so that in the Greek, Latin, and German languages the second element was probably appended to the first and second personal pronouns in the objective cases. We have already adverted to the metaphysical significance of this phenomenon.

It may be objected to this explanation of the identity of *ha*, *γα*, &c., that, if so, this element is repeated in such combinations as *ἐγῶγε*, *ἐγῶγα*, *ἰῶγα*, &c.; but it will be remembered that nothing is more common than such repetitions of the same root in pronominal compounds, and especially when it appears under slightly modified forms. When it is placed after the termination *-ν-*, as in *ἐγῶνγα*, the word is a compound of two compound pronouns, into each of which similar pronominal elements enter: for *νγα* or *ναγα* is a compound analogous to *me-he*, *mi-hi*.

135 As the three primitive personal pronouns are expressions for the three relations of place, we ought to find in the Greek and cognate languages traces of the use of all the primitive forms as demonstrative pronouns; and we do so. Of the third it is unnecessary to speak. With regard to the first; in Sanscrit we have *i-ma*, "this-here," from which Bopp derives the Latin words *im-ago* and *im-itor* (*Demonstrativstämme*, p. 21). The Greek demonstrative *μίν*, and, as we shall hereafter show, the preposition *με-τά*, the particles *μέν*, *μά*, and the verbs *μᾶω* = *μένω*, *maneo*, &c., all contain this element*. It appears as a suffix to the second and third personal pronouns: in Sanscrit, *tra-m*, *aya-m*, as well as *aha-m*; in Latin, *tu-met*, *vos-met*, *se-met*, *ipse-met*, as well as *ego-met*, *nos-met*. The second element, under the form *dva*, is used as a demonstrative in the numerals. Of its use under other forms derived from *ἑα* we shall speak by and by:

If now we look into any practical Grammar of the Greek language, we shall see that, while the first and second persons are always expressed, when they require pronominal expression, by the forms *ἐγώ*, *σύ* or their oblique cases, the pronominal expression of the third person varies with the particular reference, which is intended in the construction of the sentence. All three persons may be denoted by demonstratives, that is, in terms of the third person, if we think fit to employ the *indicative* pronouns *ὁδε*, "he who is here, *i. e.* by me," *οὗτος*, "he who is near, *i. e.* by you," and *ἐκεῖνος*, "that other man, *i. e.* he who is there." Thus

* *Μίν* from the first person and *νίν* from the third are so completely synonymous that, as we have shown elsewhere (*ad Pindar.* p. lviii), euphony alone determines their employment in the lyric poets.

ὅδε signifies the speaker and his client in a law-suit, but οὗτος denotes the opposite party, usually the defendant, as "the person before you, the person in your court." Or, more generally, ὅδε ἀνὴρ = ἐγώ, and, in addresses, ὦ οὗτος = σύ. For example, we have Eurip. *Alc.* 690: μη θνητῶς ὑπὲρ τοῦδ' ἀνδρός, οὐδ' ἐγὼ πρὸ σοῦ, where the opposition between ὅδε and ἐγώ is immediate and palpable; and Soph. *Œd. C.* 1623: ὦ οὗτος, οὗτος Οἰδίπους, τί μέλλομεν; where the repeated οὗτος (*heus tu!*) is an emphatic substitute for σύ. On the other hand, ἐκεῖνος always denotes something "other" and "distant" either in space or time, as in Arist. *Equ.* 390: τοὺς στάχυν ἐκείνους, οὓς ἐκείθεν ἤγαγεν, "those (other) ears of corn which he brought from thence (that distant place)." And so of time Thucyd. i. 20: ἐκείνη τῇ ἡμέρᾳ, "on that day (long past and gone)." It will be shown below that ἄλλος = ἄλιος, Sanscr. *anyas*, and the Latin *ille* or *ollus* and *alius* correspond ultimately, in form as well as meaning, to κεῖνος = κένιος = *ἑάνιος* (§ 166). And it is well known that the distinction between ὅδε, οὗτος, and ἐκεῖνος, as representing demonstratively the three personal pronouns, is exactly given by the Latin *hic*, *iste* and *ille*, and the Italian *questo* (= *ecce iste*), *cotesto* (= *ecce tibi (eccoti) iste*), and *quello* (= *ecce ille*) (see Diez, ii. 369). But besides the *indicative* pronouns, which, though always construed with the third person of the verb, may thus denote or refer to the three persons in this distinction, the third person may be expressed by the *reflexive* pronoun ἑ, accus. ἑ, by the pronoun of *self* or *sameness*, αὐτός, by the *distinctive* pronoun ὅς (ὁ), and by the indefinite τις. It is worthy of notice, that although αὐτός is combined directly with the first two personal pronouns and with the reflexive in the form ἐμαυτοῦ, σεαυτοῦ, ἑαυτοῦ, and may always stand in apposition to ἐγώ and σύ, or take their place with verbs of the first and second person, its use in the oblique cases is simply that of a pronoun of reference in the third person, like the oblique cases of the Latin *is*, and while ὁ αὐτός ἀνὴρ, "the same man," corresponds in use to one derivative from *is*, namely, *i-dem*, the other derivative *i-pse* is represented by an apposition of αὐτός to a noun sufficiently defined, as ὁ ἀνὴρ αὐτός = *vir ipse*, "the man himself." Similarly, although αὐτός, even in an objective sentence, may appear as the apposition of the subject, when that subject can be expressed in the

nominative, it is regularly opposed to the reflexive, as object to subject, when that pronoun appears in the accusative; compare Thucyd. iv. 28, § 2: οὐκ ἔφη αὐτός, ἀλλ' ἐκεῖνον στρατηγεῖν, "Cleon said that not he himself (ὁ αὐτός), but the other (Nicias), held the office of general;" with Thucyd. iii. 24: νομίζοντες ἡκιστα σφᾶς ταύτην αὐτοὺς ὑποτοπῆσαι τραπέσθαι, "thinking (the Plateans) that they (the Thebans) would by no means suppose that they (the Plateans) had turned that way."

From all this, it is clear that the personal pronouns, whatever position they designate, are necessarily demonstrative, and that the variations in their use depend rather on the usages of syntax than on the original significations of these primary words themselves.

136 The common dual and plural of *aham* and *tvam* are in the nominative and accusative as follows: nom. dual, *āvām*, *yuvām*; accus. dual, *āvām* or *nau*, *yuvām* or *vām*; nom. plur. *vayam*, *yūyam*; accus. plur. *asmān* or *nas*, *yushmān* or *vas*. It will, of course, be understood by every one, that the plural of the first personal pronoun, of which the dual is only a modification, could not be formed from the singular as the plural of any noun might be. The plural of this pronoun must signify one of two things,—either a collection of persons united in the idea of *here*, and, as such, separated for the moment from the rest of the world, or, as between two speakers, the idea of *I + you*. On analyzing these Sanscrit forms we shall find that one of these meanings is always implied. The plural *va-ya-m* is a combination of two modified forms of the first and second pronouns respectively, to which the common element of the first is added to imply more strongly that the notion of *here* is intended. Therefore, *va-ya-m* means "I + you here." Similarly, the plural *yū-ya-m* is a repetition of the second element, with the same suffix. Of the first syllable we will speak presently. We have already mentioned the employment of the pronoun expressing distance or separation to denote the first person, and explained how, in fact, there is not that absolute difference between pronouns of different persons which habit leads us to imagine. It is true that there was and is a distinction in meaning between the stems *ma* and *ta*, as signifying the opposition of *here* to *there*. But they are, both of them, essentially demonstrative, and there

is no reason whatever why modifications, in fact, stronger forms of them, should not be used to convey the notions of unity, distinctness, and separation, which run into one another. At any rate, there is no doubt of the fact, that these stems are so used; and we shall see abundant proof of it when we come to a discussion of the negative particles. We have an instance of this phenomenon in the pronouns before us. The dual *â-vâ-m* is evidently composed of the pronominal stem *â*, in our opinion a degenerated form of the third pronoun *na*, and *vâ* an entirely different element, which is unquestionably a corruption of the second pronoun under the form *sva*, and appears as *vâm* and *vas* in the accusative dual and plural. Consequently *â-vâ* and the accusative *nau* = *na-va* represent the same combination. To the whole is appended the suffix *m*, so that this word signifies "you + I *by ourselves*," which is equivalent to *va-ya-m* = "I + you *here*." In order to analyze the plural accusatives *asmân*, *yushmân*, we must take the Vêda forms of the nominative plural, *asmê* and *yushmê*. The former is written *amha* in Pâli and Prâcrit. It is obvious that the termination of these forms is *sma-i*; the aspiration of *s* in the second word is caused by the *u* which precedes, a phenomenon common enough in Sanscrit: compare the datives *amushmai*, from *amu*, and *tasmai* from *ta*. This suffix *sma*, compounded of the stems *sa-ma* and also appearing as the preposition *sam* (सम), is used to form some of the oblique cases of all pronouns of the third person; indeed, *asmât*, the ablative singular of a demonstrative, differs only in the quantity of the last syllable from *asmat*, the ablative plural of the first pronoun: *sa-ma* signifies "all taken together," "whole," "entire," "complete;" and in this sense of completeness, it is used to give verbs in the present tense a past signification: thus we have *hanti sma Râvanan Râmah* = "Râma killed" (instead of "kills") "Râvana" (Wilson, *Dict.*). The initial vowel *a* is the pronominal element *na* in the last state of mutilation, and thus the compound *asmê* = *a-sa-ma-i* (the final vowel being the mark of plurality in the case of pronouns ending in *a*, Bopp, *Vergl. Gramm.* p. 262) signifies "the *here* taken altogether," with a note of plurality appended. The first syllable of *yushmê* = *yu-sa-ma-i*, is obviously the same stem that appears in *yâyam*. As the dual accusative *nau* = *na-va* seems to have the same

origin as the form $\hat{a}-v\hat{a}-m=na-v\hat{a}-m$, it is reasonable to conclude that the plural accusative $na-s$ is a similar mutilation of $a-sm\hat{a}n=na-sm\hat{a}n$. And the same reasoning applies to the abbreviated forms $v\hat{a}m$ and vas .

We may now compare these Sanscrit forms with those which occur in some of the other languages of the Indo-Germanic family. The Latin plurals *nos* and *vos* agree exactly with the Sanscrit accusatives plural *nas* and *vas*, and the Greek duals $\nu\tilde{\omega}\tilde{i}$, $\sigma\phi\tilde{\omega}\tilde{i}$ correspond pretty well to the duals *nau* and *vām*, the latter of which, as we have said, has lost its initial sibilant or guttural. In the Greek $\nu\tilde{\omega}\tilde{i}$, the most predominant idea must have been "separation" "unity," as appears from the adverb $\nu\acute{o}\sigma-\phi\iota$, "by himself*," $\nu\acute{o}\sigma-\tau\omicron\varsigma$, "a return" (literally, as we shall see below, "a coming from a distance"), and in the pronoun *νιν*, which always stands alone, though we often have $\mu\upsilon\nu\ \alpha\upsilon\tau\acute{o}\nu$. The long vowel however shows that here, as in the Sanscrit *nau*, *vām*, we have a mutilated or abridged form, and there can be little doubt that $\nu\tilde{\omega}\tilde{i}$, $\sigma\phi\tilde{\omega}\tilde{i}$ were originally $\nu\alpha-F\acute{\alpha}-\iota$, $F\alpha-F\acute{\alpha}-\iota$. The German languages have very short forms for the plural of these pronouns; generally, in fact, modifications of the simple root. Thus the Gothic has *weis*, *yas*, Lithuanian *mēs*, *yūs*, English *we*, *you*. The Zend has also the short forms *vaēm*, *yūs*. The Greek forms $\eta\mu\epsilon\tilde{\iota}\varsigma$, $\upsilon\mu\epsilon\tilde{\iota}\varsigma$ agree with the Vēda-words *asmē*, *yushmē*; for the Æolic $\tilde{\alpha}\mu\epsilon\varsigma$, $\tilde{\upsilon}\mu\epsilon\varsigma$ (by the Æolian $\psi\acute{\iota}\lambda\omega\varsigma\iota\varsigma$ for $\tilde{\upsilon}\mu\epsilon\varsigma$) are assimilations of $\tilde{\alpha}\mu\epsilon\varsigma$, $\tilde{\upsilon}\mu\epsilon\varsigma$, just as $\epsilon\mu\acute{\iota}$ stands for $\epsilon\sigma\mu\acute{\iota}$, Sanscrit *asmi* (Bopp, *Vergl. Gramm.* p. 473), and the assimilation is represented by a long vowel in the possessive $\acute{\alpha}\mu\acute{o}\varsigma$, $\upsilon\mu\acute{o}\varsigma$ (Ahrens, *dial. Dor.* p. 262). With regard to the first syllable of $\upsilon\mu\epsilon\tilde{\iota}\varsigma$, the following remarks may suffice. The Greek aspirate often stands for the Sanscrit *y*: thus *yas*, *yaj*, *yakrīt* (*jecur*), correspond to $\delta\varsigma$, $\acute{\alpha}\zeta\omega$, $\tilde{\eta}\pi\alpha\rho$. We have no hesitation, then, in comparing the Homeric word $\iota\sigma\mu\acute{\iota}\nu\eta$, "battle," with its Sanscrit synonym *yudhma*. When we recollect phrases like *conserere pugnam*, and compare *yudhma* with *yugma* (Lat. *jugum*), "a pair," "a brace," we shall be disposed to seek for a connexion of meaning. Now *jugum*, another form of *djugum*,

* The grammarians, absurdly enough, consider this words as an abbreviation of $\nu\acute{o}\sigma\tau\omicron-\phi\iota$ (Hermann, *Opuscul.* i. p. 222).

as *Janus* is of *Djanus*, *Juturna* of *Djuturna*, &c., contains the element of the second numeral*, as does also the word *duellum*, "battle." In the next chapter we shall show that the second numeral is identical with the second person singular. As, then, the second numeral is contained in the first syllable of *yugma*, *yudhma*, ὕμλνῃ, so is the second pronoun in *yushmê*, ὕμεῖς. The suffix *-sma* is assimilated into *-mma* in the singular dative of the Gothic pronoun, just as it is in ἄμμες, ὕμμες; thus, the Gothic *thamma*, *hvamma* and *imma* correspond to the Sanscrit *tasmai*, *kasmai* and *asmai* (Bopp, *Annals of Orient. Lit.* p. 16, and Grimm, *Deutsche Gramm.* I. p. 826). It appears as *smu* in old Prussian: thus *antar-smu*, *ka-smu* correspond to the Sanscrit *antara-smai*, *ka-smai* (Bopp, *Abh. Ak. Berl.* 1824, p. 143).

137 The nominative masculine and feminine of the third personal pronoun are as follows:

	Sanscrit.	Zend.	Greek.	Gothic.
Masc.	<i>sa, sak, sô</i>	<i>hō</i>	<i>ὁ</i>	<i>sa</i>
Femin.	<i>sâ</i>	<i>hâ</i>	<i>ἡ</i> or <i>ἣ</i>	<i>sô</i>

The Greek and Zend aspirates are of course derived from the sibilants preserved in Sanscrit and Gothic. The nearest Latin forms corresponding to these are the compounds *hi-c*, *si-c*, the latter of which is used only as a conjunction. We shall speak of these in connexion with the forms *ζ*, &c. Perhaps the original *ῢα* is preserved in its most genuine form by the Hebrew דָּוָה, though we might be disposed to compare this rather with the compound *αὐ*, of which we shall speak directly. It will be observed that all these forms belong to a different

* Compare § 180. Plato had an instinctive perception of the true etymology when he said (*Cratylus*, p. 418 D): καὶ τό γε ζυγὸν οἷσθα ὅτι δυογὸν οἱ παλαιοὶ ἐνόησαν. πάνν γε. καὶ τὸ μὲν γε ζυγὸν οὐδὲν δηλοῖ, τὸ δὲ τοῖν δυεῖν ἕνεκα τῆς δέσεως ἐς τὴν ἀγωγὴν ἐπωνόμασται δυογὸν δικαίως νῦν δὲ ζυγόν. καὶ ἄλλα πάμπολλα οὕτως ἔχει. Where Schneider supposes that we ought to read *δναγόν*, in accordance with the *Etym. M.* p. 411; but the second syllable in that case would have been long: and Plato is speaking of an old word which might have passed into *ζυγόν*. If he refers to the natural change of pronunciation which led to the *ζ*, we do not agree with Pott (*Etym. Forsch.* II. p. 35) that "δυογόν ist sicher nur blosser Fiction."

element from the neuter nominative, *tat*, *τό*, *thata*, *tum* or *is-tud*. In fact, as will hereafter be shown, it is only a masculine or feminine noun that can have a nominative case properly so called. The reason for the adoption of a form manifestly connected with the second pronominal element as a nominative of the third personal pronoun, will be obvious on the slightest consideration. The person spoken to, or designated as near, is invested with a subjectivity and personality which is denied to the object spoken of, or designated as *there*. Now, whatever is spoken of as in the nominative case, is considered as subjective in itself, though not a part of the speaker, and therefore can only be designated by a pronoun which expresses the greatest degree of nearness to the *here*. We shall return to this subject when we come to the case-endings.

138 There are two stronger forms of the demonstrative or pronoun of the third person, both compounds with the simple *ὁ*, *ἡ*, *τό*: namely, *ὁ-δε*, *ἡ-δε*, *τό-δε*, and *οὗ-τος*, *αὗ-τη*, *τοῦ-το*. The former we shall consider in the next chapter. The latter we will now notice in connexion with *αὖ-τός*, another pronoun of the third person.

The first part of *αὖ-τός* occurs as the separate particle *αὖ*, expressing removal, distance, negation, &c. And we shall see that the same particle is involved in the negative *οὐ-κ*, and the illative *οὖ-ν*. It is a prefix in *αὖ-θι*, *αὖ-τάρ*, and, in a weaker form, in *ἄ-τάρ*. In the dissyllabic form it appears in the Sanscrit *ava*, *ava-k*, and the Slavonic *ovo* (Bopp, *Vergl. Gramm.* pp. 400, 544). We consider *αὖ-τός*, *-ή*, *-ό*, as a combination of the particle *αὖ* and the inflected element *το-*, which is found in the oblique cases of the distinctive pronoun, also used as the definite article. In the Delian inscription (Böckh, *C. I.* n. 10) the first syllable appears in the strong form *AFY*, which corresponds very nearly to the Sanscrit and Slavonic varieties. Böckh supposes (p. 25) that *AFY* was not a dissyllable, that in olden times *αὐτός* was pronounced *afftos*, as in modern Greek, and that the lapidary ought to have written *AYF*. If this had been the reading we should have had a parallel case to the French *u*, as a substitute for *l*, that vowel having been prefixed to the liquid, before it actually took its place (cf. *autre* with *alter* and the old French *aulture*); but we have here the converse process, which is represented by the change of *quojus*, *quoi*, into *cujus*, *cui*, and must suppose that, at the time when the Delian inscription was set up, the digamma had lost its labial element, or the full expression of it, and was subsiding into an aspirate.

We cannot agree with Bopp (*Vergl. Gramm.* p. 491) in regarding

οὗτος, αὖ-τη, τοῦ-το as a combination of αὐτός, αὐτή, αὐτό, with the primitive pronoun ὁ, ἡ τό. Indeed, this suggestion must be added to the many instances which prove that classical scholarship is the safest basis for comparative philology. Every Greek scholar is aware that when ὁ, &c. are combined with αὐτός, &c., the crasis is αὐτός αὐτή, ταὐτό, not οὗτος, αὕτη, τοῦτο. And it is quite impossible that a combination of αὐτός with ὁ, ἡ, τό could give the meaning of οὗτος, which, as we have seen, is a representative of the second personal pronoun, whereas αὐτός means that which is away (*ava*) and by itself (above, § 135). The true explanation of οὗτος undoubtedly is that suggested by Max Schmidt (*Commentatio de pronomine Græco et Latino*, p. 38), namely, that as ὅ-δε, ἡ-δε, τό-δε are compounded of the simple demonstrative and the enclitic particle -δε, so οὗτος, αὕτη, τοῦτο give us the same simple pronoun in combination with its objective form -τος, so that οὗτος is formed from ὁ, just as αὐτός is formed from αὖ; but it is not right to compare this words with τοιοῦτος, &c., as Schmidt does, for these words are really compounds of τοῖος, &c., with the pronoun αὐτός, as appears from the feminine forms τοιαύτη, &c. In the same way αὐτός appears compounded with itself in αὐταυτος (*Sophron, apud Appollon. de Pronom.* p. 339 B). Schmidt professes his inability to explain the *v* in οὗτος, and admits that according to his analysis it ought to be ὅτος. It appears to us that οὗτος is really an older and more genuine form than ὅ-δε, and that the *v* represents the digamma of the second pronominal element, transposed according to the law which we have illustrated above (§ 116). If this is the case, the first syllable in the objective forms τοῦ-το, &c. represents the same variety of the second pronominal element as that which is found in the second numeral.

139 The nominative case ὁ=σο also appears under the subsidiary form ἱ, in which the effect of the digamma has been to convert the vowel into *i* (compare φῶς, νῖός, ὑπερφύης, with *fio, filius, ὑπερφίαλος*), and this vowel being, as we have before seen, itself a representative of the guttural, the aspiration has been omitted when less emphasis was intended. Both forms appear in Latin, the stronger as *hi-c, si-c*, the weaker as *i-s, i-terum, i-tem*, &c. The latter appears as *i-ma, i-taras* in Sanscrit. Most scholars, as well as the old grammarians, consider ἱ to be the nominative case of οὗ, οἷ, ἔ; thus we find in Bachmann's *Anecdota*, II. p. 72, l. 3: ὅτι αἱ πρωτότνποι ἀντωννμῖαι, οἷον τὸ ἐγὼ, σύ, ἱ; and again, II. p. 66, l. 28: τὸ ἐμεῖο καὶ σεῖο καὶ εἷο, εἰ μὲν πρωτότν-ποι εἰσιν ἀντωννμῖαι ἀπὸ τοῦ ἐγὼ καὶ σὺ καὶ ἱ κλινόμεναι, διὰ τῆς εἷ διαφθόγγου γράφονται. So also Dionysius the Thracian (*Bekk. Anecd.* p. 640): πρόσωπα πρωτοτύπων μὲν ἐγὼ—σύ—ἱ—ἀριθμοὶ δὲ πρω-

τοῦτύπων ἐνικὸς μὲν ἐγώ—σύ—ἵ, δυνικὸς δὲ νῶϊ—σφῶϊ, πληθυντικὸς δὲ ἡμεῖς—ὕμεῖς—σφεῖς—πτώσεις δὲ πρωτοτύπων μὲν ὀρθῆς ἐγώ—σύ—ἵ, γενικῆς δὲ ἐμοῦ—σοῦ—οὔ, δοτικῆς δὲ ἐμοί—σοί—οἷ, αἰτιατικῆς δὲ ἐμέ—σέ—ἐ. The Scholiast on this passage says (p. 916 Bekker): τοῦ τρίτου προσώπου ἐστὶ τὸ ἵ, καὶ σημαίνει τὸ οὔτος ἢ ἐκεῖνος, καθ' ἑαυτὸ μὲν κειμένον εὐρέθῃ οὐδαμοῦ, ἔοικε δὲ ἀπὸ τῆς τῶν Ἀττικῶν χρήσεως εἰρησθαι παρὰ τούτῳ τῷ τεχνογράφῳ. ἐκεينوσί γὰρ λέγουσι καὶ οὐτος. That this Scholiast is mistaken, appears from the words of Apollonius Dyscolus (*de Pronomine*, p. 69 c): ἡ ταύτην οἱ μὲν φασὶ παρὰ λόγον, ὅτι οὐ διὰ τοῦ ὕ· ἀποβολῇ γὰρ τοῦ ὅ κατὰ τὸ τρίτον ἀποτελεῖσθαι σοῦ, οὔ, σός, ὅς. He proceeds (p. 70): ἀξιολιπτότερος δὲ ὁ Σοφοκλῆς μάρτυς χρησάμενος ἐν *Οἰνομάχῳ*· εἰ μὲν ὥσῃ θάσσονα εἰδῶς εἰ τέκοι παῖδα. The Venetian Scholiast, on the *Iliad* xxii. 410, reads this fragment of Sophocles somewhat differently, thus: ἡ μὲν ὥσῃ θάσσο· ἡ δὲ ὥσῃ τέξου παῖδα. From a comparison of these two readings, William Dindorf has emended this corrupt line as follows: ἡ μὲν ὥς ἡ θάσσον', ἡ δ' ὥς ἡ τέκοι παῖδα, adding, "it is said of two women, each of whom was boasting of her son's fleetness. Why they did so, is clear from the well-known story about CEnomaus." It is hardly necessary to add that παῖδα is either followed by a vowel in the next line of which it is the first word, or else that it is added by Apollonius to explain the line. Bekker thinks (*Comment. Crit.* p. 337) that ἵ might properly be substituted for ἐ in the following passage of Plato (*Sympos.* p. 175 c): μετὰ ταῦτα ἔφη σφᾶς μὲν δειπνεῖν, τὸν δὲ Σωκράτη οὐκ εἰσεῖναι. τὸν οὖν Ἀράθωνα πολλάκις κελεύειν μεταπέμασθαι τὸν Σωκράτη, ἔ δὲ οὐκ ἔαν, and appears also to suggest the insertion of this obsolete nominative in a passage at the end of the same dialogue (p. 223 d): τὸν οὖν Σωκράτη—ἀναστάντα ἀπιέναι, καὶ αὐτός, ὥσπερ εἰώθει ἔπεσθαι, where almost all the MSS. omit αὐτός (Bekker's *Comment. Crit.* p. 362). With regard to the former passage it may be observed, that, according to the rules of Syntax, ἵ would be better grammar than ἐ; that, in the passages quoted by Heindorf, on the *Euthydemus*, § 72, and on the *Sophistes*, § 42, the verb is always οἶμαι or ἡγοῦμαι, and that οἶμαί με by no means justifies φημί με, as Stallbaum (*ad loc.*) seems to imagine. In the latter passage the ἵ might so easily have been absorbed by the last letter of the preceding καί, that we cannot doubt it would be a better reading than αὐτός, which is disallowed by the MSS. In the Attic dialect we find the pronoun ἵ used very frequently as an inseparable and uninflected affix to the indicative pronouns ὅδε, οὔτος, ἐκεῖνος. This termination is long and carries the accent; thus, ὁδί, οὔτος, ἐκεῖνοσί; also in other cases, as τουτοῦτί, ταυτησί; plur. οἱ τοῖτί, αὐταῖτί, ταυτί, &c. And so also adverbs, as

ἐνθαδὶ, &c. It is right to remark in passing that the form ἐντανθοῖ has been imported into the texts of the Attic writers, and even of Homer, by grammarians, who were misled by a *prima facie* appearance of analogy. The fact is that θα,θεν,θην,θον,θι,θε are the only allowable forms of the affix -θ-. Ἐντανθοῖ is just as impossible as ποθοῖ would be. There can scarcely be any doubt that when ἐντανθοῖ is found in the Attic writers, we should substitute ἐντανθί, and when it has been intruded upon Homer we should write ἐντεῦθεν=ἐνταῦθα (above, § 114), which he uses in the same sense. The two following are important passages relative to the pronoun ἔ. Apollonius Dyscolus (*de Pronom.* p. 10B): ἀντωννύμει ἀναφορικὰ ἢ τε ἔ, οἷ, ἔ. Priscian, XIII. 2, § 7: *Quæritur etiam illud, cur, quum apud Græcos tertia persona pronominum primitivorum et in singulari numero nominativum habeat FI, et in plurali σφεῖς, apud Latinos sui et nominativo deficit, et pluralia separatim non habuit.* § 8: *Apud Græcos nominativus supradicti pronominis, id est, FI, rarus est in usu.* These authorities, combined with those quoted above, are sufficient to establish the fact, that there was originally a nominative to the reflexive pronoun οἷ, οἷ, ἔ, and that this nominative was ἔ. We need not wonder that this ἔ should be of rare occurrence. There is very little demand for the nominative of the reflexive pronoun, which is, in most cases, used objectively. The nominative of the Latin reflexive pronoun *sui, sibi, se*, never occurs, nor has that pronoun any plural number. Now what is the reflexive pronoun? Nothing more, we believe, than a form of the second pronoun, pointing at once to some person or thing close at hand, and it is always used in connected speech to refer to the person last spoken of, when that person is considered in any way as a subject, especially in relating the words of that person. The idiom of the Latin language admits of such phrases as *dixit se venturum*, but the Greek, which is much more accurate in its syntax, always requires that, if the subject is expressed in the nominative in one member of the sentence, the same case should be continued in the dependent member; accordingly, the pronoun is either suppressed, as is generally the case, for example, *Μοιροκλής οὐθεν ἔφη πονηρότερος εἶναι* (Aristot. *Rhet.* III. 10, § 7), or, if emphasis requires it, as in the line of Sophocles quoted above, or distinctness in a complicated sentence renders it necessary, as in the two passages from Plato's *Symposium*, a nominative case of the reflexive pronoun would of course be used if there were one; and we have clear testimony that there was one. The very fact that there was no plural of the Latin reflexive pronoun shows, as all undeclined parts of speech always show, that the word itself, and the peculiar use of it, belong to the oldest state of the language. As,

therefore, it is manifest *à priori* that the reflexive is nothing more in its nature than a demonstrative pronoun indicating nearness of position, we must seek for its equivalent among the oldest forms of the demonstrative pronouns. We have irresistible evidence that there was a pronoun *ἵ* as well as a pronoun *ἦ*. The Scholiast on Dionysius (quoted above) says as much, though he confused it with the reflexive pronoun mentioned by the author on whom he was annotating, and whom, like most other Scholiasts, he made a point of misunderstanding. Its existence is farther proved by Hesychius' Glosses: *ἵν. αὐτήν, αὐτόν. Κύπριοι.—εἵν. ἐκεῖνος* (leg. *ἐκεῖνον*); by what Lascaris says (*de Pronomine*, III. p. 344): *τοῦ τρίτου προσώπου ἡ ὀνομαστική κατὰ παλαιούς ἵ* (leg. *ἦ*) *καὶ ὅς*, and by the remark of Draco (p. 106): *ἡ ἵ ἀντωνυμία ἡ σημαίνουσα τρίτον πρόσωπον βραχὺν ἔχει τὸ ι*; for if *ἵ* was short, it could not have been the same with *ἦ*, which we know from the passage of Sophocles, and from the terminations *ἐκεῖνος-ί*, *οὗτος-ί*, &c., to have been a long syllable. Moreover, the conjunction *εἰ*, "by this that" = "on this condition" — is, as we shall show, the dative of *ἦ*, just as the Latin *si* is the dative of *sis*; the pronoun also evidently enters into *ἦ-γνητες*, the Rhodian word for *ἀντιγενεῖς*, i. e. "born in that place," into *ἦ-σος*, *ἦ-ος*, *ἦ-ωρος*, and *ἦ-διος*, and we have seen its appearance in Latin and Sanscrit. The evidence indeed for this pronoun is so strong that Hermann and Böckh have not hesitated to introduce *ἵν*, as the dative, into the text of Pindar (*Pyth.* IV. 36; *Nem.* I. 66). It is quite clear, then, that the Greeks had two pronouns, the stronger aspirated form *ἦ* being used to express the reflexive relation, i. e. relation to something near and immediate; the *ἵ*, a synonym for *αὐτός*, to denote something in which the idea of nearness was not so directly implied; and, therefore, to return to the common terminology, *ἦ* is a complete, and *ἵ* a shortened or mutilated form of the second personal pronoun, which appears in the ultimate analysis as the stem *Fa*. The same was the case in Latin. The common pronoun *i-s* expresses the weakest demonstrative relation, the equally common pronoun *hi-c* signifies "that which is near:" the termination *c* is a mutilation of the ordinary affix *ce*, so that we should write *hun-ce*, not *hunc-ce*. This termination is by no means confined to the singular, as some scholars have imagined. In good writers we have *hi-c* for *hi* (Varro, VI. 73), and *hæ-c* for *hæ* (Plautus, *Aulularia*, III. 5, 59; Terence, *Eunuch.* III. 5, 34; *Phormio*, V. 8, 23; Varro, V. 75, &c.). Now this pronoun *hi-c* stands for the Latin *si-c* by the common change from the sibilant to the aspirate, and to the same root belong *se-d*, *si*, the forms in Ennius *sa-m*, *sap-sa*, *su-m*, *so-s*, and, we have no hesitation in saying, also the reflexive *su-i*, *si-bi*, *se*. It is highly interesting to know that in the

Rig-vêda we possess the weaker forms *i-m* (also an old Latin form) and *i-d*, and also the stronger form *si-m*.

140 This supposition that the reflexive pronoun is identical with that of the second person, and merely indicates nearness of place, is fully borne out by the use of *ἐ* in Homer, where it occurs as a demonstrative pronoun implying nearness, and is used in the singular and plural of all genders: thus *Iliad* I. 236:

ναὶ μὰ τόδε σκῆπτρον τὸ μὲν οὔποτε φύλλα καὶ ὄξους
φύσει, ἐπειδὴ πρῶτα τομὴν ἐν ὄρεσσι λέλοιπεν,
οὐδ' ἀναθλήσει, περὶ γὰρ ῥά ἐ (nam circa hoc) χαλκὸς ἔλεψε
φύλλα τε καὶ φλοιὸν νῦν αὐτὲ μιν υἷες Ἀχαιῶν
ἐν παλάμῃς φορέουσιν·

when we see that *τόδε*, *ἐ*, and *μιν* are used with reference to the same object and in the same manner. And in the Hymn to Venus, v. 268:

τῇσι δ' ἄμ' ἢ ἐλάται ἡ δούεσ ὑψικάρῃνοι
γεινομένησιν ἔφυσαν ἐπὶ χθονὶ βοττανείῃ
καλαί, τηλεθάουσά, ἐν οὔρεσιν ὑψηλοῖσιν
ἔστ᾽ ἡλίβατοι, τεμένη δέ ἐ κικλήσκουσιν
ἄθανάτων (hæc autem vocant).

141 With regard to the use of *ἐ* both as singular and plural, it is to be observed, that while we have *ἄμμε*, *ὑμμε*, constantly in the plural, we have *ἐμέ*, *σέ*, invariably as singular forms. We may remark, too, that the endings of the datives plural *ἄμμιν*, *ὑμμιν*, of the datives singular *ἐμίν*, *τίν*, *γίν* = *φίν* (= *σοί*, Hesychius), and of the accusatives *μιν*, *νιν*, *ἴν*, are the same: *σφιν* is both singular and plural: for its plural use see Matthiæ's Note on Herodotus, p. 285, and for its use in the singular, see Hom. *Hymn. Pan.* 19; Æschylus, *Persæ*, 761; Sophocles, *Œd. Col.* 1847, and Reisig, *Enarr.* p. clxxxi; Buttmann, *Lexilogus*, Vol. I. p. 60. It is very easy to conceive why there should be identities in the case of pronouns, where there are such marked distinctions in the other parts of speech; the fact is certain, and it is an additional proof, if proof were needed, of the exceeding antiquity of these little elementary words. If the pronouns were, as will be shown hereafter, used for the purpose of distinguishing the cases and numbers of nouns, it is obvious that in the original pronouns there could be no consistent distinctions of that kind.

142 It will be observed by every reader of the Greek writers, that the ordinary dual and plural forms of the reflexive pronoun were

identical with the second personal pronoun, in form, and with both first and second personal pronouns in signification. Thus we have *σφωέ*, "they two," *σφῶϊ*, "ye two;" *μετὰ σφίσιν*=*μεθ' ὑμῖν* (Hom. *Iliad* x. 398); *σφέτερος*, (1) "yours," Hesiod, *ἐ. κ. ῥ.* 2, and elsewhere; (2) "mine," only in Theocr. *Id.* xxv. 163; (3) "thine," Theocr. *Id.* xxii. 67; (4) "ours," Xen. *Cyr.* vi. 1, § 10. In the same way we find words into which the element *εἷ* enters, used to express the first and second persons; thus Moschus, *Idyll.* iv. 77: *μηδὲν σε χειροτέτερον φρεσὶν ἦσιν στέργειν* ("my own heart"); Hom. *Iliad.* xix. 174: *σὺ δὲ φρεσὶν ἦσιν ἰανθῆς* ("your own heart"); *Odys.* i. 402: *πῆματ' αὐτὸς ἔχοις καὶ δώμασιν οἷσιν ἀνέσσοις* ("your own house"). The same is the case with the cognate Sanscrit word *svayam*, and its possessive adjective *svas*. Now it may be asked with regard to this fact in Greek and Sanscrit, why it happens that such an extension of meaning is given to the reciprocal in those languages, while in Latin the same pronoun is never used, except in the third person. The fact is, that the Romans made but a sparing use of their pronominal words in comparison with the Greeks, as indeed appears from their unacquaintance with that particular sort of pronoun called the article, and from the infinitely greater number of pronominal particles in Greek and Sanscrit. As a natural consequence, we find in Latin a greater restriction upon the free use of these particles and pronouns, and a greater uniformity in the employment of them, for, not possessing an extensive variety of pronouns, they frequently used as distinct words what were only different articulations of the same form. Thus, while they employed *suus* (in Ennius *sus*) = *svus* (Greek *σφός*, Sanscrit *svas*), as the possessive of *se*, they turned the by-form *σφέτερος* into *vester* (compare *σφήξ* with *vespa*), just as they converted *σφῶϊ* into *vos*. It must be observed, that the use of the reciprocal in the third person, is infinitely more frequent than its use in the first and second persons; and the reason is plain: for as all pronouns denote relations of place, and the primitive pronouns differ only in the degree of nearness to the *here*, a pronoun expressing, as the reciprocal does, a special nearness, would be more naturally and more frequently superseded by the first and second personal pronouns than by the third, in other words, there might be a necessity for the expression of a particular kind of nearness in the third person, which could arise but seldom in the case of the other two persons.

143 We have before shown how the stem of the second personal pronoun (element *fa*) enters into *σφῶϊ*; it will be equally easy to point out the etymological connexion of *σφέ* and *εἷ*. That the latter was a digammated word is well known, and we have shown before

how often the digamma was a representative of the double sound *sv*, as in ἡδύς = *ῥηδύς*, compared with *svādus* (Sanskrit), *suāvis* = *svadvis* (Latin); and ἐκνός = *ῥεκνός*, compared with *gvaçura* (Sanskrit). The Latins dropt the labial in *se*, and vocalized it in *sus*; or omitted the sibilant as in *vos* and *vester*; similarly the ordinary Greek omitted the labial, and softened the sibilant into an aspirate. This intimate etymological connexion between the reflexive or reciprocal pronoun, and that of the second person, throws very great light on both. It was to express an idea of relative *nearness* that the second of the old pronominal roots was originally employed: it is the same idea of relative *nearness* that constitutes the distinction between *ἐγώ* and *ἐκείνῳ*, between *hic* and *ille*, between *questo* and *quello*.

144 The inverted Dorian forms *ψέ*, *ψίν*, deserve notice from their constant appearance in Latin. We have in Ennius *sāpsa*, and in Plautus *eāpse*; in the former word the enclitic is inflected as well as the personal pronoun, and in more modern Latin the form *i-pse* always retains its first syllable unaltered, while the *-pse* is subjected to inflexion in every case. This alone should be a confutation of those who fancy something essentially accusative in *ἐγώ*. The same may be said of *ἐ-τερός*, which must be connected with this pronoun, and cannot be derived from *ἐν*, as Bopp seems to suppose (*Demonstrativstämme*, p. 14).

145 We come now to the most important part of this subject: namely, the discussion of the indefinite, interrogative, and relative pronouns. In the Latin language these three pronouns contain the same element; the question is whether this is also the case in Greek and Sanscrit, a question to which we should be inclined to seek for an affirmative answer, as well from the analogy of the Latin, as from general considerations. In our own every-day language we constantly use a demonstrative for a relative, and we must be conscious to ourselves of frequently using a demonstrative sentence, with a difference of tone, in an interrogative sense. This alone would lead us to believe that there cannot be any radical difference between the demonstrative and these particular kinds of pronouns. A little investigation will satisfy us that in the Greek and Sanscrit languages they are all etymologically identical, and all connected with the pronoun of the second person (element *ῥα*).

146 The Latin interrogative and indefinite are both written *quis*; the relative is written *qui*. In these words therefore

the root is *qv-* or *kv-*. It has been already shown (§§ 110, 121) that a double consonant-sound like *kv* may be superseded by a single representative of one of its two constituent parts. This is particularly the case with the digamma sound, which, we have shown, was this same compound sound *kv* = *kp*. There are many instances in which this compound sound in Latin words is represented in Greek, Sanscrit, and Gothic, or one of them, by one of its elements; for example, we have Latin *co-qv-o* compared with the Sanscrit *pach*, and the Greek *πέπω*; *o-qv-ulus* compared with the Sanscrit *aksha*, and the Greek *ὄμμα* = *ὄππα*; *lin-qv-o* compared with *λείπω*; *qv-atuor*, and *qv-ingv-e* compared with the Sanscrit *chatur*, and *panchan*, Greek *πέτορες*, *τέτορες* (*τέσσαρες*), and *πέντε*, *πέμπε*; *a-qv-a* compared with the Sanscrit *ap*, Gothic *ahva*; *se-qv-or*, compared with the Sanscrit *sajj*, and Greek *ἔπομαι*. We may also compare the Latin *an-qv-is* with the Sanscrit *ahis*, and the Greek *ἔχis*. Similar changes have taken place even in the same language; thus, to take an instance in point, the Oscans, according to Festus, wrote *pitpid* for *qv-id-qv-id*, and the terminations *-qvam*, *-ce* were identical with *-piam*, *-pe*. The guttural element *ce*, which thus appears as a substitute for the labial *pe*, was further softened into *hi*, as is shown by a comparison of *hi-c* "this," *ci-s*, *ci-tra*, "on this side," *ci-terio* and *ci-timo*. In fact, *qui*, *si-c*, *hi-c*, *is*, are four forms of the same pronominal root, signifying relative proximity, in which the guttural element has successively degenerated. Accordingly, if all the Sanscrit and Greek forms of the relative, interrogative, and indefinite, are resolvable into one or other of the elements of this compound Latin consonant, we are entitled to conclude in favour of their original identity with one another. The full form is preserved in the Gothic *hver*, *hva*; we pronounce the labial only in *which*, *what*, and the guttural only in *who*, *how*.

147 We now turn to the Sanscrit forms. This language has three interrogative stems, *ka*, *ki*, *ku*: thus, from the first and second, *kas*, *ka*, *kim* = *quis*, *quæ*, *quid*? from the second, *kiyan*, *kiyati*, *kiyat* = *quotus*, *quota*, *quotum*? and from the third, *kutas* = *unde*? *kutra* and *kva* = *ubi*? From the second of these interrogative stems comes, by the softening process which is

always going on in languages, the indefinite *chit*, just as *church* from *kirk*, *chambre* from *camera*, &c. This particle, also written *chana* when added to the interrogative, gives it the sense "any one," "whosoever," "a certain person," just like *quis-quis*, &c. in Latin: thus *kach-chit* (from *kat-chit*, used as an interrogative particle like the Latin *an* and *num*), *kaç-chit*, *kaç-chana* = *quispiam*. The copulative conjunction *cha*, also from this root, agrees as well with the Latin *que* as with the Greek $\tau\epsilon$, the connexion of which is otherwise shown by a comparison of the forms $\delta\tau\epsilon$, $\pi\acute{o}\tau\epsilon$ with $\delta\chi\alpha$, $\pi\acute{o}\chi\alpha$. It appears unsoftened in the Vêda-forms *mâkis*, *nakis* = *nequis* (softened again in the Zend *mâchis*, *naê-chis*), in *mâ-kir*, *na-kir*, *mâ-kim*, *na-kim* = *nisi*, *non* (Colebrooke, *Gramm.* p. 121); and so also in the old Pelasgo-Etruscan, if we are right in supposing that *ne-ke* = *ne-que* in the Hexameter inscription at Naples first printed by Lepsius (*die Tyrrhenisch. Pelasger*, p. 42), which we divide thus: *mi ni Mulve neke Velthu ir Pupliana*, and render, "I am not Mulva nor Volsinii, but Populonia." A comparison of these words with *ni-hil*, *ne-quivd*, together with the analogy between *hi-c* and *ci-s* before pointed out, can leave no doubt in our minds as to the connexion of these terminations with the second pronominal element *Fa*. The Sanscrit relative is *yas*, *yâ*, *yat*; the *y* standing for the aspirate in $\acute{o}s$, $\acute{y}$, $\acute{o}$, according to what we said upon *yushmê* und $\acute{y}\mu\epsilon\acute{\iota}s$. That the demonstrative meaning entered largely into this relative, appears from a comparison of the Zend demonstrative *yim*, Latin *jam*, "at this time," with the relative sense preserved in *yadi*, "when," and in *yadî*, "wherein" = "if" (comp. $\epsilon\acute{\iota}$ and $s\acute{i}$). It will be remembered that the German *wenn* signifies both "when" and "if," and we shall see (below, § 205) that $\epsilon\acute{\iota}$ may, in the combination $\epsilon\acute{\iota}\ \pi\acute{o}\tau\epsilon$, bear a temporal meaning. It may be concluded, then, that the Sanscrit interrogative, indefinite, and relative, spring from the guttural part of the digamma, which is the initial of the second pronominal element.

148 If we even confined ourselves to the Greek language alone, we should have no difficulty in recognising the connexion between the relative and demonstrative. Greek Syntax teaches us that the relative $\acute{o}s$, $\acute{y}$, $\acute{o}$, is only a later and more emphatic

form of the distinctive pronoun or definite article δ ($\delta\varsigma$), η , $\tau\acute{o}$. In Homer we find the latter both as relative and antecedent; thus (*Il.* i. 125): $\acute{\alpha}\lambda\lambda\alpha\ \tau\grave{\alpha}\ \mu\grave{\epsilon}\nu\ \pi\omicron\lambda\lambda\iota\omega\upsilon\upsilon\ \epsilon\grave{\xi}\ \epsilon\pi\rho\acute{\alpha}\theta\omicron\mu\epsilon\nu,\ \tau\grave{\alpha}\ \delta\acute{\epsilon}\delta\alpha\sigma\tau\alpha\iota$: and even in Attic Greek, the distinctive pronoun is occasionally used for the oblique cases of the relative*, just as our "that" appears instead of "which." Generally, however in the more fully developed syntax of the language, $\delta\varsigma$, η , $\delta\acute{o}$, as relative pronoun, is limited in its application to some sentence containing a finite verb, in close conjunction with which it forms a periphrastic definition or description of some object considered as otherwise well known, or else, which is the highest refinement of syntax, it makes some general assumption or supposition. But whether the antecedent, or object referred to, is *definite* as in the former case, or *indefinite* as in the latter, the relative sentence exists only by virtue of its antecedent; in other words, it is a syntactical contrivance which plays the same part as the adjective or genitive case; and Mr. Garnett, in the paper already quoted (*Essays*, pp. 214 sqq.), has collected instances from various languages in which the affix of the genitive case is manifestly identical with the relative pronoun. The Semitic languages, which, as we have before remarked (above, § 49), are in a tertiary or merely syntactical state, and have consequently lost their apparatus of inflexions, show, more clearly than even the inflected languages, that a demonstrative or indicative pronoun is the vehicle or instrument by which human speech expresses the connected, if not concurrent, notions of a relative sentence, an adjectival epithet, and a genitive case. It is well known to every Hebrew scholar that the noun to be expressed in the genitive case is placed unaltered after the governing noun, which, being affected by the contact, is said to be in the construct state. Not unfrequently the qualifying or genitive noun has prefixed to it the distinctive pronoun *hal*, which serves as a definite article, and sometimes a relative sentence takes the place of the genitive. Thus *mizmor* being "a

* Some have attempted to limit this use to the neuter gender, as well as to the oblique cases. But there are authorities for the use of the masculine ($\tau\acute{o}\nu$, Eurip. *Bacch.* 712, $\tau\acute{o}\upsilon\varsigma$, *Androm.* 810) and feminine ($\tau\acute{\eta}\nu$, Soph. *Trach.* 47).

psalm," we might express the phrase, "a psalm of David" by (a) *mizmor-David*, (b) *mizmor had-David*, (c) *mizmor 'hasher* or *she le-David*, which would be in Greek, (a) *ψαλμο-Δαβιδ*, (b) *ψαλμὸς ὁ Δαβιδ*, (c) *ψαλμὸς ὃς τῷ Δαβιδ*. In Chaldee, Syriac, Samaritan, Ethiopic and Arabic, the demonstrative pronoun *di*, *de*, *za*, and *dsa*, which is regularly used as the relative in these idioms, is as regularly employed to mark the genitive relation, and we have elsewhere* pointed out instances in which the cognate Hebrew pronoun *zeh* is used in the same manner. For example the LXX translate *mi-p'nêi helôhîm zeh-Çinai* by *ἀπὸ προσώπου τοῦ Θεοῦ τοῦ Σιναι*. The most instructive feature in this usage is the occasional corroboration of the distinctive particle by another pronominal element, which is properly synonymous with it, but which is prefixed by way of antecedent when the demonstrative import is superseded by the relative. We have seen instances of this in the relative *'ha-she* itself, and in the compounds *a-ha-m*, *e-go*. And the genitive may be expressed not only by the relative *'hasher* or *she*, but also by the article and relative *ha she*, and even with a double determinative, as in *'heth ha she*. It has therefore been rightly suggested by Mr. Garnett that the termination *a* in Ethiopic construct nouns, and the *-i* and *-u* in Hebrew and Arabic, are derived from pronominal elements of a demonstrative and, ultimately, a relative nature. As the guttural in the Semitic languages constantly subsides into the vocal *chirik*, there is no reason why *Ābi-melek* should not represent an original *Āb-ha-melek*. We must return to this important subject when we come to speak more at length of the adjective; at present enough has been said to show that there is no reason for doubting the connexion between the relative and the second pronominal element indicating proximity. Indeed, there are some languages, in the ultimate condition of departure from the original etymological structure, which express the strongest form of the relative sentence either by the correlation of two pronouns expressing nearness, or by placing one of these in the relative clause: thus in

* *Prælectio Philologica in Deborahæ Canticum Triumphale*, Cantabrigiæ, 1848, p. 11; *Jashar*, Berolini, 1854, p. 337.

the instance* quoted by Buschmann (Humboldt, *über die Kawi-Sprache*, III. nr. 720), either of the relative sentences, *qui fidelis amicus est, is fidelis in rebus adversis est*; or *qui fidelis in r. a. est, is est fidelis amicus*; is expressed, *is fidelis amicus est, is fidelis in rebus adversis est*. And in the celebrated Chinese saying, usually attributed to a greater than Confucius, we find the demonstrative used instead of the relative only: *kì sò pŭ yŏ, uě shī yŭ jĭn*, which is literally: “ipse *hoc* non cupis, ne inferas hominibus.” In the most interesting and important application of the relative construction, namely, to the formation of hypothetical propositions, we shall see that the Greek not only opposes the antecedent *ἐν* to the relative *ἐί*, but occasionally, in the older poets, introduces *καί* in the protasis as well as in the apodosis.

149 The indefinite and interrogative pronouns in Greek are both written *τις*, originally *τι-ν-ς*, the distinction between them being that one is an enclitic, the other accentuated; the one being written after, and the before, the word to which it refers: in the former case, the want of accent unites the noun and its corresponding indefinite so closely, that they may fairly be considered as one word. That the first part of *τιν-ς* is not connected with the third pronominal root *ta*, as might be supposed on a casual inspection, appears, to a certain extent from the fact, that their uses in Greek are absolutely and diametri-

* We have taken this and the other example from Dr. Steintal's tract entitled “de pronomine relativo commentatio philosophico-philologica cum excursu de nominativi particula” (Berolini, 1847), p. 87. This author, who is an enthusiastic disciple of W. von Humboldt, applies his master's principles to an investigation of the use of the relative chiefly in the Chinese and African languages. With regard to the Indo-Germanic idioms he states specifically (p. 101), “relativum in his linguis e demonstrativis et interrogativis ortum esse.” But he defines the relative generally as the *demonstrativum formale* (p. 84), and says that whereas the personal suffixes denote *coincidence*, and the demonstratives (including case-endings and prepositions) signify *dependence*, the proper use of the relative is to express *inherence* (p. 21). In all this there is rather an accumulation of words than a clear statement of definite notions. The relative is neither more nor less than a particular logical employment of the pronoun signifying proximity.

cally opposite. We are not speaking here of the nominative, masculine and feminine, of the Greek article, which we believe to be of the same origin with the relative, &c., but of the oblique cases which *τις* externally resembles. The article, *ὁ, ἡ, τό*, is a pronoun which would not in all cases express with sufficient definiteness any particular object, even though that object may have been mentioned before: the name of the object is therefore added to avoid a vague generality. Conversely, when it is desirable to express that some class is known, but not a particular individual of that class, the general attributive noun is put first, and the indefinite word after it. And thus, if it is necessary to lay particular emphasis on the *class*, the *individual* of which we do not know, a Greek would not hesitate to prefix an article and affix an indefinite to the same word; thus we have, in a distributive sentence, in Eurip. *Med.* 1141:

κυνεῖ δ' ὁ μὲν *τις* χεῖρ', ὁ δὲ ξανθὸν κάρα
παίδων—

and similarly in Herod. ii. 60: αἱ μὲν *τινες* τῶν γυναικῶν κρόταλα ἔχουσαι κροταλίζουσι, οἱ δὲ αὐλέουσι, αἱ δὲ λοιπαὶ γυναικες καὶ ἄνδρες αἰδούνουσι, and αἱ μὲν *τινες* τῶν γυναικῶν ποιεῦσι τάπερ εἴρηκα, αἱ δὲ τωθάζουσι, κ. τ. λ., where the *τινές* implies, that the women are not divided into two sets, previously arranged and regularly distinguished, as if the indefinite pronoun were omitted, and the sentence were simply distributive; but that the women with the castanets are any members of the party who happen to be so furnished. In the same way we have the indefinite after a noun with the article prefixed, as in Soph. *Æd. Tyr.* 107:

τούτου θανόντος νῦν ἐπιστέλλει σαφῶς
τοὺς αὐτοέοντας χειρὶ τιμωρεῖν τινάς,

i. e. “the murderers (for we know he was *murdered*), whoever the particular persons may be (for we do not know that):” and thus *Œdipus* immediately asks οἱ δ' εἰσὶ ποῦ γῆς; “where are they?” a question which shows how the interrogative might have arisen from this use of the indefinite, with merely the change of tone indicated by the accent: *γυνή τις—τίς γυνή*; “a woman somewhere” — “where?” But, if *τις* is not connected with the stem *τα*, how is it to be explained? It is sufficiently obvious that it is not the primary and genuine, but

a secondary and corrupted form of the original interrogative and indefinite. We find traces both of the labial and of the guttural element of the original *ῥα* even in the existing state of the language: we have the former in the Attic words *ποῦ*, *ποῖ*, *πότε*, *πόθι*, *πόθεν*, *πόσος*, *ποῖος*, *πότερος*, &c., and of the latter in their Ionic equivalents *κοῦ*, *κοῖ*, *κότε*, *κόθι*, *κόθεν*, *κόσος*, *κοῖος*, *κότερος*, &c. The latter of these two forms appears immediately in the Latin word *cur*, and also in (*c*)*ubi*, (*c*)*unde*, (*c*)*uter*, (*c*)*ut*, as we may fairly infer from the compounds *ali-cubi*, *ali-cunde* and from a comparison of the Latin *amo* with the Sanscrit *kāmayāmi*. That these words, however, are only the older and more genuine forms of the interrogative *τίς*, appears from a comparison of *τέτορες*, *τε*, *ὅτε* &c. with *πέτορες*, *καί*, *ὅκα*, &c., and from the identity of *πέντε* with *quinque*, Sanscrit *pañchan*, &c.; so that *τίς* is merely a corrupted form of *ῥίς*, the course of the changes being from *sv* through *hv* to *dv*, *tv*, and *ti*. We have shown that the Sanscrit relative *yas* is another form of the Greek *ὃς* (= *σός*), and it appears that the indefinite and interrogative *τις*, *τίς* are identical with *chis*, *kis*. In fact, *τις* is nearer to the Latin synonym *quis* than *τε* is to *que*, for the guttural element is very sufficiently represented by *ti=j*. The full crude form of *τις* is of course *ti-v-*, the latter part being the third element under the type *na**. In other words, it is a compound of two pronominal elements, like *εἷς=ē-v-s*, *κεῖ-vos*, *τῆ-vos ἄ-νά*, &c. It bears, therefore, the same relation to *ὃς*, *yas*, *qui*, that *Ζήν*, *Janus*, Tuscan *Tina*, does to *Ζεύς*, *Ju-piter*, *Jov-is*. As this termination *-v-* is emphatically demonstrative, it might, at first sight, seem strange that the interrogative and indefinite pronoun should be distinguished in the Greek language only by such an affix. But this very affix appears as the regular interrogative particle in the Latin *-ne*, and as a proclitic we have *en*, not only as an interrogative particle, in *en-unquam*, *ec-quis* = *en-quis*, but also to call attention, in the sense "look here!" which is, in itself, a form of question—e.g. in *en* and *ecce* = *en-ce*, Greek *ἤνι*.

* This addition, which Schömann regards as unessential, in order to bring in his strange etymology, *τ-ίς=is-te* (Höfer's *Zeitschrift*, i. 2, pp. 250, 1), has caused some difficulty to Lobeck also (see *Varronianus*, 143, note).

It is on this account that the Greek interrogative is less adapted than the Latin to take the place of the relative in a dependent interrogation; it generally assumes the compound form ὅστις when it is thus used, and there are very few passages in which τίς appears for the relative indefinite. In *Æsch. Sept. c. Theb.* 417: τοιῷδε φωτὶ πέμπε τίς ξυστήσεται, τίς ἄνδρα κομπάζοντα μὴ τρέσας μενεῖ, the editors suppose a recurrence to the direct interrogation; and in Callimachus, *Epigr.* xxxi. 2: ἐχθαίρω το ποίημα τὸ κυκλικὸν οὐδὲ κελεύθῳ χαίρω, τίς πολλοὺς ᾧδε καὶ ᾧδε φέρει, we ought perhaps to read χαίρω ὅστις. It is difficult to say why the tenuis τ in this word, in the pronoun τύ = τφε, in the terminations -τις, -τους, and in τέτορες, τε, &c., has taken the place of the medial δ or medial aspirate θ, which are generally the dental representatives of the sibilant: but there is abundant reason to believe that this substitution has been made; indeed, as we shall see in the following chapter, the more original form of τις, namely, δέις = δειν-ς or δειν-ς, has not quite vanished from the language, and δε = δφε still stands by the side of τε = τφε. In general, we remark a tendency to substitute the tenuis for the medial, which is especially manifested in the altered value of θ. And, in regard to the particular case, as the natural changes, which are always at work upon a language as long as it is a spoken one, continued longer in operation in Greek than in Sanscrit, we are entitled to conclude that the Greek relative was also, in the Pelasgian state of the language, identical with the indefinite and interrogative. As an illustration of the affinities between the Greek and old Persian, to which we have already adverted, it is worthy of remark, that the relative in the Behistun inscription, as deciphered by Rawlinson, is written both *tya* and *hya*.

150 The original demonstrative power of the Greek interrogative stem κ (_ε^α) is still preserved in a number of words in common use, such as κά-τα, κεί-νος, καί, κεν (κα Doric), and γε (γα Doric). This root may also be recognised with a *demonstrative* power in the modern French *ce, ci, ce-tte, ce-ci, ce-lle*, and in the Italian *ci*. The use of *ci*, as the accusative plural of the first personal pronoun, is an additional illustration of the demonstrative nature of that pronoun.

We must bestow a little consideration upon some very important words indicating relations of time into which this root *kv* (under certain regular varieties of form) enters with the demonstrative signification. The Sanscrit word for "yesterday" is *hyas*, the Greek *χθές*, the Latin *her-i* from *hes-i* (*hes-ternus*, Sanscrit *hyas-tanas*), and the Gothic *gis-tra*. All these words manifestly contain the same element *kv-*, represented by *hy-* in the Sanscrit word, by *χθ-* in Greek, by the common aspirate in Latin, and the guttural in Gothic. A comparison of *χθών*, *χθαιμαλός*, *χαμαί*, and *humus*, shows that *χθ* is occasionally represented by *χ* or *h* only. We do not believe that the syllable *-as* is, as Bopp suggests (*Vergl. Gramm.* p. 568), a mutilation of *divas*. In a word of such common use, an adjective pronoun signifying nearness might be used without any substantive, just as *bruma* (= *brevima*) is used for "the shortest day" without any addition of *dies*. The same root also enters into the Sanscrit word *crvas* (= *kvas*), Latin *cras*=*csas*; these words imply nearness as well as *hes-*, &c., but as the nearness is predicated with a prospective and not a retrospective reference, a different form of the same root has been adopted. The word *peren-die*, "on another day" (*para*, "another," Sanscrit), should also signify "tomorrow," but all-powerful custom has assigned to it the meaning "on the day-after-tomorrow." The word *vesper*, *ἑσπέρα*, "evening," is made up of the pronoun *ves* (= *hes*=*chthes*=*gis*=*hyas*), and the pronominal adjective *para*, *pera*, which we have seen in *peren-die*, only here *para* is used in the sense of "late" or "after," as in *paráhna*, "the afternoon," "the latter part of the day" (from *para*, "after," and *ahan*, "a day"); the initial pronoun, retaining its signification of nearness, is applied by another change in the association to a part of the present day, and *vesperus* means "this day late" or "after this day." These transitions by association are all so many facts; the reason for them, though easily explained, are most easily felt; and it is better to investigate these curious time-adjectives by the application of such a simple principle, than by the hypothesis of almost impossible mutilations, as Bopp does. The word *ἡμέρα* itself, the second part of which (*μερ-*) is evidently the element of *μέρος*, may be connected with the Sanscrit root *dyá*=*já* (compare *ἡπαρ*, *jecur*, *yak-rit*, &c.): so that *ἡ-μέρ-α* will signify "the light," "the part of the twenty-four hours during which the sun shines." Or rather, to go farther back, it may be the preposition *διά*, *dya*=*ja*, which appears in *ἡμισυ*=*διά-μεσος*, and which we have no hesitation in recognising in the adjective *ἡμερος*, the regular antithesis to *ἄργιος*. Thus, too, we must compare *ἡγεμών*, *ἡγεῖσθαι*, with *διάγω*, *δίσιπος* (*Æsch. Pers.* 44), &c.; for the preposition *διά* seems particularly applicable to the functions of a leader or guide. We consider *ἡμερος*

as originally predicable of a country through which there was a road or passage, a country divided by a road (διάμερος), just as ἄγριος was properly applied to a rude open country with nothing but ἄγροί. The Grammarians distinguish between ἄγριος and ἀγρεῖος, and confine the local meaning to the latter (Bachmann, *Anecd.* II. p. 375, 29: ἄγριος καὶ ἀγρεῖος, ποιητικόν, διαφέρει· ἄγριος ὁ ὠμός· ἀγρεῖος δὲ ὁ ἐν τῷ ἀγρῷ); but this does not affect the etymology of the older form. And the primitive meaning of the correlative word ἡμερος is shown by the following passages: Æschylus, *Eumenid.* 12—14:

πέμπουσι δ' αὐτὸν καὶ σεβρίζουσιν μέγα
κελευθοποιοὶ παῖδες Ἡφαίστου, χθόνα
ἀνήμερον τιθέντες ἡμερωμένην.

Plato, *Legg.* p. 761 A: ὁδῶν τε ἐπιμελουμένους, ὅπως ὥς ἡμερώταται ἕκασται γίνωνται; Philostr. *vit. Soph.* p. 552: ὤνησε δὲ καὶ τὸ ἐν τῇ Ἰταλίᾳ Κανύσιον ἡμερώσας ὕδατι μάλα τούτου δεόμενον: compare Pindar, *Isthm.* III. 75 (IV. 97):

καὶ βαθυκρήμονυ πολιᾶς ἄλδς ἐξευρὼν θέναντα,
ναυτιλιασί τε πορθμὸν ἀμερώσατο.

which refers to the passage of Hercules through the straits; and for the etymology, compare Ἡπειρος with its epithet διαπρύσιος (Pindar: *Nem.* IV. 51), on the principle pointed out by Lobeck (*ad Soph. Aj* 254, p. 193). The effect of such road-making on civilization appears clearly enough from what Aristotle says of the Herculean way, and of the protection afforded to those who travelled upon it (περὶ θαναμασίῳ ἀκουσμάτων, c. 85, p. 837 Bekker)*. We consider *dies*, *dyâ*, &c. of pronominal origin, like the particle *δή*, which generally refers to time.

151 From the facts here stated, we are entitled to conclude, with regard to the pronouns in general, that they were all originally demonstrative; that there are three primitive pronouns; that the second of these, which indicates nearness to the *here*, gave birth under the form *Fa* to the reflexive pronoun and the relative, which are identical with it; and that different modifications of this same second personal pronoun were subsequently used to express all relations of nearness, till at last in modern Italian a word formed from the same root came to be used to express the *here* itself, that is, the first personal pronoun.

* We have treated this important subject at greater length in the *Varronianus*, pp. 268—271. On the connexion in meaning between ἄγρός (which contains the same root as ἀγών, ἀγορά) and χορός, χάρος, see below, § 229.

152 The adjectives formed from pronouns constitute an interesting subject immediately connected with that which we have been discussing. In regard to the possessives formed from the personal pronouns, it appears singular that, while those from the second and third person are regularly formed from the genitive case, the possessive of the first pronoun, *ἐμός*, though it contains the adscititious *ε* which we have noticed as an occasional prefix to the objective cases of the pronoun itself, omits the *ε* in the second syllable: there is, however, reason to believe that Homer used the form *μέος* from *μέο*, like the Latin *meus* from *mei*, which is quite regular, and *ἐμός* is only a corruption of an original *ἐμεός*, from *ἐμέο* for *ἐμεῖο* (§ 134). The Sanscrit possessives are *madiya*, "mine," *tvadiya*, "thine," *tadiya*, "his." The first syllable of the two former is identical with *mat*, *tvat*, the ablatives of the pronouns. The only ablative of the third person which is in use is *tasmât*, but it is very likely that a shorter form, analogous to the ablatives of the other two pronouns, was once in existence; at all events, constant use would easily generate such an abbreviation in the compound. It will be shown in a future chapter that *dia* or *tia* is the full or original form of the ablative affix, from which, of course, these possessives are derived. This termination is also found in the Greek adjectives of quality *οῖος* (*δ-ιος*), *ποιος* (*πο-ιος*), *τοῖος* (*το-ιος*), the *d* or *s* having dropt out, just as the *s* has been absorbed in the cognate genitives in *-οιο*, in which we should expect *-σιο* on the analogy of the Sanscrit genitive ending *-sya*; compare *ἐδίδοσο*, *ἐδίδου*, *δίδοισο*, *δίδοιο* (Bopp, *Vergl. Gramm.* p. 220). Indeed, as we shall show hereafter, *-διος* and *-σιος* are by-forms of the genitive or ablative case. The *d* is preserved in *ῥδιος* from the pronoun *ῥ*. This termination in Greek is properly and regularly used to denote *derivation*, *kind*, or *quality*: we might, if we liked, consider the Sanscrit affix as compounded of the demonstrative and relative, and signifying "that which;" but it is better to refer this form to the genitive or ablative ending. The Greek pronominal adjectives signifying *quantity* are *ὄ-σος*, *πό-σος*, *τό-σος*, &c. We have elsewhere pointed out that the termination *-σος* signifies "a collection" or "aggregate," even when found as a part of nouns, and it obviously bears the same sense in these pronominal words. But how did it get that sense? It cannot be doubted that *ῥ-σος* has the same termination. Now it is well known that this word was originally pronounced *ῥσος*, and even *ῥίσφος*, as appears from the necessities of the metre in Homer, and from the gloss *ῥίσγον*, *ῥσον* in Hesychius. The labial was, however, dropt in the course of time, and *ῥσος* appears in all the later poets with the first syllable short, so that this is no reason for denying its connexion with *ὄ-σος*, &c. in point of termination. As *ῥ-σος* and

τόσος are synonyms, both signifying "so great," i. e. "equal," an examination of the common part in these words will lead to a proper interpretation of the affix σος=Fος=σφός. This word implies "all that belongs to the person near us," a meaning which includes in it the idea of a collection or aggregation; and this is just what we want. The Greek termination -λίκος or -λιξ, (ῥήλιξ, ὁμῆλιξ) runs through most of the sister-languages. Thus we have in Gothic *svaleiks*, *hvê-leiks*, Anglo-Saxon *thy-lic*, German *ähn-lich*, *so-lcher* (so-like, such) and in English *like*. In Latin many very common adjectives are formed with the termination -lis: e. g. *æ-qua-lis* (from *æ-quus*, Sanscrit *ê-kas*, "that which"), *rega-lis*, *vir-i-lis*, *missi-lis*, *humi-lis*, *simi-lis*, *fame-licus*, &c. The word *fe-lix* contains the full form of this termination; the first part of the word is connected, as Bopp suggests (*Vergleich. Grammatik*, p. 606) with the Sanscrit *bhâj*, not, as others have supposed, with *fe-tus*, *fe-tura*, *fe-mina*, &c. It is related to *fau-stus*, *fav-or*, &c., and the Greek φάFος (ὑπο-φᾶν-σις). It might be written φᾶνλιξ in Greek characters*, like φᾶν-λος, "light," "blown about by every breeze" (FάFω, *Fav-onius*); and signifies literally "light-like," i. e. "brilliant," "splendid†."

* We are aware that the surname of Claudius *Felix* is written Φῆλιξ in Josephus, xx. 6; *Act. Apostol.* xxiv.; Suidas s. v. Κλαύδιος. This is not, however, an etymological transcription, but only an attempt, like the ᾠκ ἄγε (*hoc age*) of Plutarch, to represent the sound of the Latin word.

† On the connexion of "light" and "air," see Book iv. ch. 5. The Latin adjective *dives* conveys the same idea as *felix*: see *Journ. of Philol.* II. p. 354. And perhaps we may also compare *be-atus* with φαητός.

CHAPTER II.

THE NUMERALS.

153 Why numerals have lost their original signification. 154 Connexion of the first numeral with the first personal pronoun. 155 Similar affinities of the second numeral and second pronoun. 156 Origin and explanation of *δείς* and *δεῖνα*. 157 The third numeral and its use as a comparative affix. 158 The fourth numeral compounded of the first and third. 159 Why the first four numerals are declined in Greek, and the others undeclined: eight the dual of four. 160 The sixth and seventh numerals how related. 161 The fifth, ninth, and tenth numerals are to be referred to a decimal system of computation. 162 Views of Lepsius on this subject, and on the higher numbers. 163 Vague expressions for large numbers. 164 Ordinals, and their connexion with comparatives and superlatives. 165 General comparison expressed by the affix *-ων*. 166 Comparative words, such as *ἥμισυ, μέσος, ἕλλος*. 167 Superlatives in *-ιστος* derived from adverbs in *-ις*.

153 SINCE it is the tendency of inflected languages to become more and more abstract, as they develop themselves syntactically by means of writing, and, by striving after generalization, to lose the immediately perceivable meaning of their individual words, we might expect that this tendency would soonest be realized in the numerals*. The use of numerals at all is an abstraction, and one of the highest kind; it is stripping things of all their sensible properties and considering them as merely relations of number, as members of a series, as perfectly general relations of place. Hence it is, that the short-

* There have been many important treatises on the subject of the numerals. The most valuable are those by Lepsius (*Ueber d. Ursprung u. d. Verwandtschaft der Zahlwörter in der indogermanischen, semitischen u. d. koptischen Sprache*, Zwei Sprachvergl. Abh. Berlin, 1836) and by Pott (*Die quinare u. vigesimale Zählmethode bei Völkern aller Welttheile, nebst ausführl. Bemerkungen über die Zahlwörter Indogerm. Stammes u. einem Anh. über Fingernamen*, Halle, 1847). The second of these treatises is to a certain extent controversially opposed to the former; and though we are indebted to Dr. Lepsius for many interesting details in the present chapter, we think his leading principles (pp. 92 sqq.) untenable, and we have here followed up the views respecting the classification of the pronominal elements, which we have set forth in the preceding chapter. We have made the Hebrew numerals the subject of a special investigation in a tract entitled *Maskil le Sopher*, London, 1848, pp. 41 sqq.

hand of written language has arrived at its completion in numerals sooner than in any other words; for while all other words are expressed by combinations of letters, the words expressing abstract number have, in all languages, a set of distinct symbols or cyphers for their expression. In the language of Algebra the same method has been carried so far, that we can now, by a systematic combination of single letters, carry on the most complicated analytical reasonings in all sciences based upon one or other of our primary intuitions of space and time.

154 It was hinted in the last chapter, that the first three numerals are the three personal pronouns; this we shall now endeavour to prove by considering them in detail.

The root of the first personal pronoun is *ma*; it signifies "that which is here." The natural connexion between the ideas of *here*, *that which is near to the here*, and *there*, and the numbers "one," "two," "three," needs no formal exposition: the vulgarism "number one" as a synonym for the first person, and the *proximus sum egomet mihi* of the Latin comedian, speak in the plainest terms for this identity. Our business is to establish the etymological fact.

The Greek word expressing the number one was a regularly inflected adjective; in the ordinary writers we find $\epsilon\iota\varsigma$, $\mu\acute{\iota}\alpha$, $\epsilon\nu$, but in Homer the feminine is written $\iota\alpha$ (*Iliad* iv. 437, XIII. 354, XXI. 569), in which, as well as in the ordinary masculine and neuter, we discern no traces of the first pronominal root $\mu\alpha$. Döderlein (*Lat. Synon.* iv. p. 52) supposes that $\iota\alpha$ is connected with $\mu\acute{\iota}\alpha$ as *eo* is with *meo*, and $\delta\lambda\alpha\iota$ with *mola*. The following investigation will show that there is no connexion between $\iota\alpha$, or, as it should be written, $\iota\alpha$, and $\mu\acute{\iota}\alpha$.

Man is naturally led to adopt one of two methods of arithmetical reckoning: the decimal, suggested by his own hands and feet, and the duodecimal, derived from the twelve moons. The latter system was of more frequent use in ancient times than it is now, though we still have our *dozen* as a distinct term, and still divide the day into two portions of 12 hours each, and carry the same division into our tables of weights and measures. Among the Greeks, the prevalence of this system is more strongly shown by the 12 gods, most of them clearly con-

nected with the months, and by the frequent occurrence of the number 12 in political subdivisions. We find that most ancient states had some regulative number which was the basis of their social organization. "Twelve," says Niebuhr, "was the fundamental number of the Ionians, which appears in their towns in the Peloponnesus and in Asia, as well as in the Attic *τριπύες*. Their primary number was four; then each quarter was subdivided into three" (*Hist. of Rome*, II. p. 20). He should rather have stated that the primary number was twelve, a number suggested by the changes of the moon, and that this number was divided into three tetrads. The influence of this subdivision upon the formation of the numerals will be seen by and by. But if twelve was the regulative number of the Ionians, and if this number was, as is highly probable, suggested by the number of the moons or months, should we not expect that the words for an "unit" and a "month" would be identical? Now the Ionian word for a month or moon is *μείς* (Homer, *Iliad* XIX. 117; *Hymn. Merc.* 11; Hes. *ἐ. κ. ἦ.* 559; Herod. II. 82), and this is also found in Æolic (Pindar, *Nem.* v. 82, comp. Suidas and Zonaras under the word *μείς*). The feminine *μία* therefore perfectly corresponds with this form. And we shall proceed to show that the common particle *μέν* is the regular neuter of *μείς* = *μέν-ς*.

A full discussion of all the usages of *μέν*, as a conjunction, belongs rather to the syntax of the conjunction than to the present subject*. We shall now insist only on those of its uses which most strikingly show that it means "the first thing," "in the first place." This amounts almost to a certainty when it is considered, that, in its regular use, it is always opposed to *δέ*, which can be proved to mean "in the second place." It is also proved by this circumstance, that *μέν* never stands alone without suggesting the idea of something that is to follow. Thus, when Socrates is going to catechize Meno's slave, he asks the master, *Ἑλλην μὲν ἐστὶ καὶ ἐλληνίζει*; "He is a Greek, I suppose, and talks Greek" (Plato, *Meno*, p. 82 B). Here an *εἰ δὲ μή* is obviously implied: "if he is not, he will not serve my purpose of questioning him:" so also in the answer *πάνν μὲν οὖν*, which is

* See *Greek Grammar*, Art. 559-568.

so common in Plato's dialogues, there is a manifest suspension of part of the sentence: "you are right, but what then?" (*τί δ' ἔπειτα*;) and there is always an expectation of something ulterior in the use of *μέντοι* in answers: e. g. Aristophanes, *Equites*, 890: *τὸν καῦλον οἶσθ' ἐκεῖνον τοῦ σιλφίου τὸν ἄξιον γενόμενον*; "Do you remember the fall in the price of laserpitium?" where the Demus answers, *οἶδα μέντοι*—"To be sure I do, and what of it?" In such phrases as *ἢ σοὶ μὲν ἡμεῖς πανταχῇ δρῶντες φίλοι* (Soph. *Antig.* 634), the other part of the opposition (*εἰ μηδενὶ ἄλλῳ*) is so obvious that it is omitted. There are also cases where *μέν* standing alone recalls the idea of the first person, and is nearly equivalent to the Italian phrase *in quanto a me*, e. g. Plato, *Crito*, p. 43 D: *οὔτοι δὲ ἀφίπται, ἀλλὰ δοκεῖ μὲν μοι ἥξειν τήμερον*. In other passages it means "first of all," "above all others," as in Homer, *Iliad* v. 893: *Ἥρης, τὴν μὲν ἐγὼ σπουδῇ δάμνημ' ἐπέεσσιν*. From all this it appears certain that *μέν* is the neuter of *μεῖς*, which bears the same relation to *men-sis* that *θεῖς* (*θέντης*) does to *θέντος* (Böckh, *Staatshaush.* II. p. 395).

We have therefore *μεῖς*, *μία*, *μέν*, as complete in all its parts as *εἷς*, *ἓα*, *ἐν*, and containing the elementary pronominal form *με*. We find the same root and with the same signification in *μόνος*, "only," "one-ly" (Ionic *μοῦνος*, Doric *μῶνος*), which answers also to the Gothic possessive *meins*. The *ἓα* mentioned above is obviously connected with the second pronominal element: compare *ἦ*, *hi-c*, &c.: there are many coincidences in use between the first and second elements; see above, §§ 135, 150, &c.

The first Sanscrit numeral *ékas* is, as we have before suggested, related to *aham*, the nominative of the first pronoun; it is represented by the Greek *ἕκας*, *ἐκάτερος*, *ἐκαστος*, and is probably formed, as Bopp supposes, from the demonstrative stem *é*, and the relative or interrogative *kas*, with the meaning "that which:" we shall speak again of this word in a future chapter. Bopp has attempted to find a further remnant of the Sanscrit numeral in the word *cocles*, which is explained as "one-eyed" (Plin. *N. H.* xxxvii. 55: *coclites* qui altero lumine orbi nascuntur), and which he would consider as a compound of *ca* for *éka* and *oculus*. In a similar manner he would explain the

Gothic *haihs*, and the Latin *cæcus*, which he writes *caicus*. Grimm also compares *κύκλωψ* (*Gesch. d. deutsch. Spr.* p. 255). It appears to us that *cocles*, which has the same formative ending as *aries*, *miles*, *paries*, &c., is derived from *cæculus*, a diminutive of *cæcus*; and we have no objection to consider *κύκλωψ* another derivative of the same kind: cf. *προύλες* with *prælium*, &c. *Luscus* seems to be *λοξός* with the common inversion of the elements of ξ; and both *Cocles* and *Λοξίας* may be proved to mean "an archer." The ordinary Greek *εἶς* = *ἕνς* is connected with the Sanscrit demonstrative *ê-na* (*aina*), with the Gothic *aina*, and with the Latin *unus*, most anciently written *oinos*, by the substitution of an unaspirated long for an aspirated short vowel before explained, just as *êkas* and *ἕκας* are connected. The same word also occurred in Greek (see the Commentators on Hesychius, *sub vv.* οἶνη and οἰνίζειν), and we have it with an *s* instead of the aspirate in the Latin words *sem-el**, *simplex*, *sem-per*, and *sin-gulus*, just as *ἕκας* appears under the form *secus* in the same language.

155 It is clear that the first Greek numeral contains the first pronominal element; it is no less so that the word expressing the number two is identical with the second personal pronoun. In the last chapter it was suggested that the three original pronouns would probably be the three tenues *pa*, *ka* = *qa*, *ta*; that the first might be represented by the cognate sounds *ma* or *va*, and the second by that double sound *Fa*, a combination of the guttural and labial, which so often appears in certain languages of the Indo-Germanic family, where we have only a labial or a guttural in the others. We have seen that in some cases the second element is represented only by *τF*, *tv*, or *τ*. It was also mentioned that we might extend or modify the signification of these elements by combining them with one another, or with the element *ra*, denoting motion or beyond. Thus, the compound *tva-ra* might represent the third position, which might also be expressed by the third element alone. Now it is the corruption *tv* which constitutes the usual form of the second personal pronoun; and this form of the second pronoun exactly coincides

* Pott (*Zählmethode*, p. 156) derives *ἄ-παξ* from *πήγνυμι*; cf. *ἐπιμίξ*, *ἐναμίξ*, &c.

with the second numeral. In most cases, however, the more ancient *d* has not been superseded in the numeral by the tenuis *t*, which takes its place in the personal pronoun. Thus, we have in Sanscrit *dvau*, in Zend *dva*, in Greek *δύω*, *δύο* (= *δφο*), in Latin *duo* (*dvo*), but in Gothic *tvái*. In this, as in other cases, where two consonants make one sound, we frequently find one of them standing as a representative of both (§ 121). Sometimes the dental is omitted, as in *ἄμ-φω* (*ἀνὰ δφο*), in *ἑξήκατι*, *vi-ginti* and *viñ-çati* instead of *δῑξή-κατι*, *dvi-ginti*, *dviñ-çati*: so also in *bellum*, *bonus*, *bini*, *bis*, *bes**, from *dvellum*, *dvonus*, *dvini*, *dvīs*, *dvēs*. At other times, on the contrary, the labial is dropt, as in *δέ*, *δέω*, *δῖς*, *δισσός*, *δώ-δεκα*, *διμήτωρ* (Sanskrit *dvimâtrī*).

It has been remarked that the origin of the second personal pronoun is the idea of comparative nearness. An examination of the second numeral will show that the same is the case with it. That *δέ* is the shortest form of this numeral, is proved by its constant use in the obvious sense of "in the second place," and by the verb *δέω*=*δέφω*, "to bind" (compare *twine*, *two*). Besides, the numeral *δύο* was also written *δύε*=*δφε*: this might be inferred from the Attic form *δνεῖν*†, and we clearly read it in an Arcadian inscription (1511, l. 7, Böckh): *μνᾶς δύο καὶ τριάκοντα*. Now this particle *δέ* is often used in composition to express comparative nearness. In this sense it appears in *ὄ-δε*, "the man near" (§ 135), &c. It is also used to express motion towards, or a tendency to become near, as in *Ὀλύμπων-δε*, "towards Olympus," *οἴκων-δε*, "homewards," *Ἀθήνας-δε*=*Ἀθήνας-δε*, "towards Athens‡." It is found with the same meaning in *δεῦρο*=*δέφρο*, a word which requires some explanation. We have before remarked on the change of place to which the digamma is liable:

* See Salmas. *d. Mod. Usurarum*, p. 252.

† On the difference between *δνεῖν* and *δνοῖν* see Bachmann, *Anecd.* II. p. 372, 2: *δνεῖν δίχα τοῦ ἄρθρου γενικῆς ἐπαγομένης, ἔ καὶ ἰ τοῖν δνοῖν δὲ μετὰ τοῦ ἄρθρου, ο καὶ ἰ* (cf. II. p. 390, 31; Blomfield *ad Prom.* 803; Dorville, *Chariton*, p. 527; Porson, *Advers.* p. 94).

‡ Since the above was first published we have seen an ingenious attempt by the late Professor Hunter to connect *δέ* and *-δε*, *at* and *ad*, *two*, *to*, and *too* ("A grammatical Essay on the nature, import, and effect of certain Conjunctions; particularly the Greek *δέ*: read June 21, 1784." *Trans. of the R. Soc. of Edinburgh*, Vol. I. pp. 113—34). On the relation of *-δε* to *-θεν*, see below, § 263.

there is nothing singular, therefore, in the change from $\delta\mathcal{F}\varepsilon$ - to $\delta\varepsilon\mathcal{F}$ -. That such a change has taken place in this root, is manifest from the fact, that $\delta\varepsilon\upsilon\tau\epsilon\omicron\varsigma$ in the only ordinal of $\delta\upsilon\omega$, and that $\delta\mathcal{F}\acute{\epsilon}\omega$, to bind (which we have shown to be immediately formed from this root), is intimately connected with $\delta\acute{\epsilon}\omicron\mu\alpha\iota = \delta\varepsilon\upsilon\omicron\mu\alpha\iota$. The word $\delta\acute{\epsilon}\mathcal{F}\rho\omicron$ signifies "in this direction," $\delta\varepsilon\upsilon\tau\epsilon\omicron\varsigma$, "a man who is nearer to us than another man," and $\delta\varepsilon\upsilon\tau\alpha\tau\omicron\varsigma$ "a man who is nearest to us of a series of men," i. e. "the last," and thus it is used as a synonym for $\acute{\upsilon}\sigma\tau\alpha\tau\omicron\varsigma$. The Latin *secundus* is only a lengthened form of *sequens*., as will be shown in a future chapter.

156 There is another word of the highest interest connected with the second numeral, which these combinations will enable us to explain: we mean the pronoun $\delta, \acute{\eta}, \tau\omicron \delta\varepsilon\iota\upsilon\alpha$, or, as we would write it (after the analogy of $\acute{\omicron}\delta\varepsilon, \acute{\eta}\delta\varepsilon, \tau\omicron\delta\varepsilon$),— $\acute{\omicron}\delta\varepsilon\iota\upsilon\alpha, \acute{\eta}\delta\varepsilon\iota\upsilon\alpha, \tau\omicron\delta\varepsilon\iota\upsilon\alpha$. This word signifies, that, though we know perfectly the particular person or thing we are speaking of, we either cannot or will not mention the name: it was, therefore, natural enough that a word, signifying proximity, should be added to the personal pronoun, to refer to a person or thing definitely conceived, but indefinitely mentioned. Now we have seen that the first personal pronoun, when used to express the first numeral, was lengthened from $\mu\varepsilon$ - into $\mu\acute{\epsilon}\iota\varsigma = \mu\acute{\epsilon}\nu\varsigma$. We should expect, therefore, that the second pronominal root $\delta\mathcal{F}\varepsilon$ or $\tau\mathcal{F}\varepsilon$ would be analogously lengthened into $\delta\mathcal{F}\acute{\epsilon}\iota\varsigma = \delta\mathcal{F}\acute{\epsilon}\nu\varsigma$ when used to express the second numeral. This termination $-\nu\varsigma$ ($-\nu|o|s$) was, as we shall see under the prepositions, a strong expression of locality, and this sense is highly appropriate for a transfer of the weaker relations of space which constitute persons, into those stronger ones which originated the numerals. Let us inquire then, if there ever was such a word as $\delta\acute{\epsilon}\iota\varsigma$. The author of the *Etymologicum Magnum* says (p. 639, l. 11, Sylb.): $\text{Οὐδ}\acute{\epsilon}\iota\varsigma. \text{Ἰστέον ὅτι τοῦ οὐδέ}\acute{\epsilon}\iota\varsigma, \text{ὅτε ἰσοδυναμεῖ τῷ οὐτίς, δύο μέρη λόγον εἰσί, τό τε οὐ, καὶ τὸ δεις. οὐδὲ γὰρ ἐστὶ σύνθετον. εἰ γὰρ ἦν σύνθετον, ἦμελλε πρὸ μᾶς ἔχειν τὸν τόνον. πᾶν γὰρ ὄνομα μονοσύλλαβον συντιθέμενον ἀναβιβάζει τὸν τόνον—παῖς, εὐπαῖς· χθών, ἀντόχθων· Θοράξ, Σαμόθραξ· χωρὶς τοῦ πτώξ, πολυπτώξ.—αὐτοῦ δὲ τοῦ οὐδέ}\acute{\epsilon}\iota\varsς τό οὐδέτερον, δέν, χωρὶς τῆς οὐ παραθέσεως ἔχομεν παρὰ Ἀλκαίῳ ἐν τῷ ἐνάτῳ, Κούδὲν ἐκ δεινὸς γένοιτο, Ζηνόβιος. See Mullach, *Quæst. Democrit.* p. 362. So also Chæroboscus (*Bekkeri Anecd.* p. 1362): $\delta\acute{\epsilon}\nu, \acute{\omicron}\pi\epsilon\omicron \text{ ἰσοδυναμεῖ τῷ τι.}$ In fact, as we have suggested above (§ 149), $\delta\acute{\epsilon}\iota\varsigma = \delta\acute{\epsilon}-\nu-\varsigma$ is really the older form of $\tau\acute{\iota}\varsigma = \tau\acute{\iota}-\nu-\varsigma$. The word $\mu\acute{\epsilon}\iota\varsigma$ has the flexion $\mu\acute{\epsilon}\iota-$$

ρός (Böckh, *C. I.* i. p. 741), as well as μένος (Chærobosc. in Theodos. i. p. 200, ed. Gaisford). Similarly, we find δεινός, as well as δενός, from δεις. There is no more difficulty therefore in the adverb δεινα from δεις, than in ἴνα from εἰς*. But, besides this adverb, we find traces of a regular declension: thus we have gen. δεινός, dat. δεινι, accus. δεινα, in the singular, and nom. δεινες, gen. δεινων, accus. δεινας, in the plural. The form of the dative plural may be inferred from the forms τοῖς-δεσι, τοῖς-δεσσι. These forms are all regular inflexions of δεις, just as μινί, which is found in an inscription, is formed from μεις. We may, therefore, reasonably infer that there was originally such a Greek word as δεις=δένς corresponding to μεις=μένς, and that when ὁ δεινα is used in the nominative case, the second part must be considered as an adverb. In regard to the genitive δεινός as compared with δενός, quoted by Zenobius, we may remark that there was also a form εἶνα for ἔνα. See *Lex. de Spir.* p. 240, and Buttmann's *Mythologus*, Vol. ii. p. 142.

From these two words μεις=μένς and δεις=δένς, we have μήν, δήν, and μή, δή, which we shall discuss in a future chapter. We have also μήν, μηνός, "a month," as well as μεις, μεινός. It may be thought singular that while μέν preserved the final consonant, it is dropt in the correlative δέ. It is to be remarked, however, that in words of such common occurrence, the shortest forms would naturally be preferred, unless there were some reason to the contrary, as there is in the case of μέν, which would otherwise be confounded with the pronoun με, whereas no confusion could take place between the second personal pronoun and such a modified form as δέ. Of the omission of ν in such cases, we have other instances in κεν, κε, ἔνεκεν, ἔνεκε, πρόσθεν, πρόσθε, and probably -δε, -θεν.

An objection has been made by Buttmann (*Ausführl. Sprl.* § 70, *Anm.* 7, note) to the derivation of οὐδεις from οὐ and δεις, namely, that the forms οὐδεμία, οὐδέτερος and οὐδέποτε, manifestly contain οὐδέ. Now it is also a theory of Buttmann's that οὐθεις, οὐθέν are the masculine and neuter of this same οὐδεμία, the δ being turned into a θ by the contact of the aspiration, just as is the case in ὄθ' Ἐφυῆς (found for ὄδ' Ἐφυῆς in an old inscription, Böckh's *Corp. Inscript.* i. p. 32), and as Thiersch would write in Pindar πενταετηρίδ' ὄπως, Ἑλλάδ' εὐρόης (Thiersch's *Pindar*, ii. p. 349). It is, therefore, unnecessary to suppose, because an οὐδὲ μία implies an οὐδὲ εἷς, which indeed occur as two words in the older writers, and as one

* Schömann (Höfer's *Zeitschr.* i. 2, p. 249) suggests that ὁ δεινα is a combination of ὁ, δέ, and ἴνα: and Mehlhorn (*Gr. Gr.* § 110) identifies δεις with εἷς, to which it ultimately reverts, although the use is widely different. See Chærobosc. in Theodos. p. 199, Gaisford.

word—*οὐθείς*— in the more recent authors, that there could not be such a compound as *οὐ-δείς*. The only question is, whether there is such a word as *δείς*. If so, and it appears clear that there was, *οὐ-δείς* is just as allowable as *οὐ-δέ* or *οὐ-δέ-εις**.

With these uses of the particles *δέ*, *δείς*, &c., we may compare the collocation *δὴ τις* = *nescio quis* (Heindorf *ad Platon. Phæd.* §. 130).

157 The root of the third numeral in the Indo-Germanic languages is *t+r* with a short vowel either interposed or subjoined, according to the etymological rule that a vowel may be sounded either before or after a liquid. In Sanscrit we have *trayas*, *tisras*, *trini*, in Greek *τρεῖς*, *τρία*, in Latin *tres*, *tria*. We do not know the nominative (*threis*?) of this numeral in Gothic, but the genitive, dative and accusative are *thrijê*, *thrim*, *thrins*. In Latin we have also *ter*, *ternio*, and *tertius*.

If the second numeral has arisen from the idea of nearness, the third must be the expression for that which is farther. The third personal pronoun *ta* does indeed express the *there*, but for the third numeral a form was required in which a relation to the second was definitely given, and therefore the particle *ra* was added to the form denoting the second numeral. This particle, which we shall examine hereafter more minutely, expresses the idea of motion from or beyond, the point from which the motion is supposed to begin being indicated by the pronominal element to which the *ra* is subjoined. If then, as is most probable, the composite *t+r* is the corruption of an original *tva-ra*, the second numeral is the parent of the third. To this point we must return, when speaking of the fourth and sixth numerals. The combination *t(e^a)-ra* is used in Sanscrit as an affix to pronominal roots, when distance, whether definite or indefinite, is implied: thus we have *amutra*, “on the other side,” *ku-tra*, “where?” It also denotes direction or tendency, and in this sense it is found in the Greek adjectives *ὀρέσ-τερος*, *ἀγρό-τερος*, *δημό-τερος*, &c. In Latin this root appears in the preposition

* The existence of *δείς* is still questioned by Pott (*Zählmethode*, pp. 152, 3), on grounds which seem insufficient in themselves. To say nothing of the passages which prove that this word was actually used, it appears to us that a sound theory respecting the particle *δέ* would almost lead us to assume this inflected form. It is surely a most unscientific proceeding to suppose, as Pott does, that *δέ* is a mutilation of *ᾠδε*.

tra-ns, signifying "beyond," and it is also affixed to pronominal stems as in Sanscrit; thus we have *ul-tra*, "on that side," *ci-tra*, "on this side." It appears too in the word *terminus*, "a limit," which has the form of a passive participle, and may perhaps be referred to the verbal root *tr* which is formed from this pronominal word, cf. *τράω*, *in-trare*, &c. The most important, however, of the uses of this word is as a suffix, indicating the comparative degree in Sanscrit, Greek, and Latin. Thus we have *ka-taras*, *πό-τερος*, *u-ter*. In this use the idea of "beyond" is also involved. Thus we are told that in the Chinese language, which has no inflexions, *hou yoong kwo gno* ("he is more vehement than I"), may be translated literally "he is vehement beyond me" (*Quarterly Review*, Vol. L. p. 187). The Hebrew method of expressing the comparative degree is not altogether dissimilar, e. g. טוב *נִבְלָק*, *melior Balaqo*, is literally "good above or beyond Balaq." The suffix *ta-ra*, as is well known, is used when only two things are to be compared, and this was its original force when employed as the third numeral: for the first numeral signifies, like the first personal pronoun, "that which is here," the second "that which is near," the third "that which is farther." Now far and near are relative terms; and though, for the purpose of expressing a person who is neither *I* nor *you*, an indefinite *there* would suffice, the number "three" must be considered more distinctly in its relation of contrast to the number two. Hence it is that the idea of *there* was extended to that of relatively greater distance, when applied in direct and particular contradiction to the idea of nearness contained in the number two. This comparative ending sometimes appears under a form still more like the common third numeral, as in *ἄλλο-τριος*, for which, however, the Æolians also wrote *ἄλλό-τερος* or *ἄλλό-τερρος*, as they also wrote *τέρτος* for *τρίτος* (Chæroboscus, *apud Cramer. Anecd.* II, p. 275, 23), *κόπερα* for *κόπρια* and *Πέραμος* or *Πέρραμος* for *Πορίαμος* (*Etymolog. Magn.* p. 529, l. 22, p. 665, l. 40; Gregor. Corinth. 639 and 907).

158 That the Indo-Germanic word for the number four is composed of those for one and three is clearly proved by the following combinations. The oldest Greek form was *πέ-τερες*

or $\pi\acute{\iota}\text{-}\sigma\upsilon\varrho\epsilon\varsigma$; the first syllable bears the same relation to $\mu\epsilon$ - that $\pi\acute{\epsilon}\text{-}\delta\alpha$ does to $\mu\epsilon\text{-}\tau\acute{\alpha}$, and the remainder of the word is only another form of $\tau\varrho\epsilon\iota\varsigma = \tau\text{F}\alpha\text{-}\varrho\epsilon\varsigma$ or $\sigma\text{F}\alpha\text{-}\varrho\epsilon\varsigma$. The Sanscrit form for this numeral is, masc. *chatvâras*, fem. *chatasras*, neut. *chat-vâri*, where the feminine appears to be anomalous; now the same anomaly is found in the feminine *tisras* of the third numeral; it is therefore clear that the last two syllables of the fourth numeral comprise the third. The same appears also from a comparison of the Latin *ter* with *qua-ter*, *ter-nus* with *qua-ter-nus*, and *tri-duum* with *qua-tri-duum*. With regard to the first syllable of the Latin numeral, it is a mutilation of the Sanscrit numeral *êkas*, "one," which, as we have seen, is synonymous with *æ-qv-us* and *secus*: this *u* will show why *-qva* stands for *-ka* in the Latin word for "four." We have before pointed out how *ki* became softened into *chi* (§ 147); such a softening would most naturally take place in an abbreviated form like *chatvâras*. By the side of the strong form *chatvâras* we have a weaker form *chaturas*. In Gothic we have *fidvôr* and *fidur-dôgs*, just as we have *qvator* and *quaternus* in Latin. It will be observed that we generally have *o*, *v*, or *u* in the second part of the word signifying "four," although the labial does not appear in the common word for "three." We have suggested before that the relation of "three" was expressed by adding the particle *ra* to the second numeral: and *tva-ra*, "motion from that which is *near to the here*," might signify the third position as well as *ta*, "*there*." Indeed, this compound would be more intelligible than *ta-ra*, for it bears outwardly the form of a comparative extension of the numeral "two," and this is the proper idea of "three."

159 It is a remarkable fact, that the first four numerals in Greek and Sanscrit, and the first three in Latin, are declined, while all the others remain without inflexion. There must be some reason for this. Now we know that the oldest Greek year was divided into three seasons of four months each: and the subdivision of the fundamental number in the state-division into the factors 3×4 , of which the four was the basis, needs not to be insisted on. The first four numerals, therefore, would be more frequently used as adjectives than any of the others,

and for this reason would have inflexions, which the others, whose use would be more adverbial, might want without so much inconvenience. The same remark applies to the corresponding fact with regard to the Roman numerals. The fundamental number of the Romans was three; they had three tribes, just as the Ionians had four. Besides, the old Etruscan year, which was the basis of their civil and religious arrangements, consisted of ten months, not of twelve, and therefore the division into tetrads would not hold with them. That this division into tetrads was observed not only in the old Greek and Ægyptian year of twelve months, but also in the Greek and Sanscrit system of numbers, is clear from the following facts. The numbers two and eight in Sanscrit and Greek have the ordinary dual-ending which is found in the dual number of nouns in those languages; they are written *dv-au*, *δύ-ω*,—*asht-au*, *ὀκτ-ώ*. The meaning of this termination is clear in the former case: can we then deny its force in the latter? But if the number eight is really in the dual number, it can only be so as denoting “twice four;” therefore the root of the number eight in these languages must be the number four. This root in Sanscrit is *ash-t-*. We have seen that the first part of the Sanscrit numeral, four, is a mutilation of *ê-ka* aspirated into *-ch*. Here the whole word is shortened and assibilated into *a-sh-*. The second part wants the letter *r*, which gives the third numeral its particular meaning, as distinguished from the second. That it is wanting here is no argument against the identity of the latter part of the root of the number eight with the number three. In words of common use, when they exceed a certain length, and especially in those which are compounds, the process of shortening and softening always takes place, sometimes to an extent which renders it difficult to discern the elements of which they were originally made up. Even the accentuation of *ὀκτώ*, as compared with the other dual-form *δύω*, seems to indicate a mutilation in the last syllable. The same remark applies to *ἐπτά*, which is not dual in its inflexion. And there can, we think, be little doubt that the Indo-Germanic forms of the numerals “one,” “two,” “three,” “four,” “eight,” must have been, in their fullest development, *êka*, *svau*=*dvau*, *sva-ra-s*=*dva-ras*=*tva-ras*, *eka-tvara-s*=*ka-tvara-s*, *eka-tvarau*=*ash-*

tvarau. An additional reason for the hypothesis of a subdivision of the duodecimal basis into tetrads is derived from the fact that in Greek, in which this division seems to have been most called for, the numbers eleven and twelve are single words *ένδεκα* and *δώδεκα*, whereas the succeeding numbers up to twenty are made up of separate words, connected by *καί*: thus *τρὶς καὶ δέκα*, *τέσσαρες καὶ δέκα*, &c. The same appears still more clearly from the Teutonic *ain-lif*, “e-leven,” *tva-lif*, “twe-lve,” which mean respectively “one” and “two left” or “over” (Bopp, *Vergl. Gramm.* 450; Pott, *Zählmethode*, 172 sqq.).

160 There are only two other numerals which appear to contain the roots of the primitive pronominal numbers; namely, six and seven, which commence with the same letters respectively in Greek and Latin. In these words, however, the process of abbreviation and softening has been carried so far that we must enter on a more minute examination of them. On comparing *ξ-ξ*, *ἐ-πτά*, with *se-x*, *se-ptem*, and the Sanscrit *shash*, *saptam*, it appears exceedingly probably at first sight that the initials in each had a common origin. Setting aside, then, this first syllable, we have in all three languages the letters *-pt-* as the element of the second part of the numeral seven, and these letters point at once to the elements of the old *πέτορες*, “four.” The first part, therefore, must be some mutilated form of the number three, so that *ἐ-πτά*, &c. will be $3+4=7$. This also appears from an examination of the corresponding syllable in the number six. Bopp remarks (*Vergleichende Grammatik*, p. 443) that as the Zend word for six is written *khshvas*, and as *sh* is neither an original letter nor the beginning of any other word in Sanscrit, we may infer that the Sanscrit word should be written *kshash*. A comparison of the Greek and Latin would incline us to believe that the more ancient form would be *ksha-ksh*, for there is an evident reduplication. And similarly the Greek and Latin words would be written *ξξ=σεξ=(κσ)ε-κσ-*, and *sex=(k)se-ks*, which are perfectly analogous to, and equally indicative of a reduplication with the Sanscrit. If, therefore, there is a reduplication it must be that the word is composed of two co-ordinate parts, and as the word is a numeral, this must express that it is a number added to itself, and in the case of the

number six, this number must be "three." Accordingly, *shash* = $\varepsilon\text{-}\eta\varsigma = se\text{-}cs = 3 + 3 = 6$. But although it appears highly probable that the numeral is composed of two words, each signifying three, it would be desirable to know how the element *ksh* could bear this meaning. And here again we find the clue in the Zend *kshvas*, which gives us not only a guttural before the sibilant, but also a labial after it. That the full form of this numeral involved a labial element is proved by the regular prefix of the digamma in the Tables of Heraclea, where we have $F\xi\xi$, $F\xi\xi\eta$, $\mu\omicron\nu\tau\alpha$, $F\xi\tau\omicron\varsigma$, &c. And this articulation appears in other Arian languages. "It is curious," says Mr. Garnett*, "to observe how the component elements of the word appear and disappear in the cognate dialects. The Welsh *chwech* has preserved the guttural and labial; the Affghan *shpaj* or *spash* the sibilant and labial; the Albanian *giast* the mere guttural; while the Armenian *wetz* corresponds pretty closely with the digamma form of the Tables." According to the law of divergent articulations (above, § 121) the fullest form is the original matrix from which these modifications have ramified. And the analysis of this group of letters is immediately suggested by palæographical considerations. For in the Behistun inscription the combination *kh-sh* is represented by two distinct characters†, and we have seen above (§ 110) that *hva* is a regular substitute for *sva*. In the particular case before us, it seems clear that *shva* represents the original form of *dva*, for, as we shall see directly, the Zend *khsh* occasionally corresponds to *cr* in Latin, and while the Greek ρ regularly represents a σ , the Latin *r* is regularly a substitute for *d*. Supposing then that the initial guttural in the Zend numeral is a residuum of *êka* (and the common Zend *âlvo* does not prevent us from supposing an original form which recurs even in the modern Persian *êk* or *yak*), we shall see that *kh-shva* = *kha-dva* = 3 is perfectly analogous to *qua-tuor* = *kha-dva-ra* = 4. And *khshvas* is the mutilated reduplication of the former.

If we examine the compound articulation *khsh*, as it appears

* "On certain initial letter-changes" (*Essays*, p. 244).

† See Rawlinson, *As. Soc.* x. '86, 157, who observes that the aspiration in each character is developed by the mutual influence of the guttural and sibilant.

in the remains of old Persian, we shall see that it corresponds (a) to *x*, as in the Greek ξξ, (b) to *s*, as in the Latin *sex*, and (c) to *cr*, as in the assumed residuum of the dental in the case of *kh-shva*=*kh-th-va*=*kh-rva*=*kh-dva* (above, § 107).

(a) We find ξ for *khsh* in the Greek Ξέρξης for *Khshayárshá*, "the venerable king*," and Ἀρταξέρξης for *Artakhshatrâ*, "the honoured warrior." When Herodotus tells us (vi. 98) that the Greek word which translates Ξέρξης is ἀρχῆος, and that the words which translate Ἀρτα-ξέρξης are μέγας ἀρχῆος, he has, as Rawlinson remarks (*As. Soc.* xi. p. 120), followed the orthography of the one word and the etymology of the other; for there can be no doubt that *khshatra* signifies "a warrior," and Rosen supposes (*Journal of Educat.* ix. 336) that *arta* is the perf. pass. partiple of *rî*, which, as appears from a comparison of the Sanskrit *sakrî*, *krîṇôti*, *mrîtyu*, with the Zend *hakeret*, *kerenoit*, *merethyu*, would be written in Zend *ereta* (comp. Bähr *ad l. Herod.*); *arta*, therefore, means "honoured," and *Arta-khshatra*, "the honoured warrior or king" (like *maha-râjah* in Sanscrit), is rather the epithet than the name of a king, as indeed appears from Ctesias, *Pers.* 49, 53, 57: βασιλεύει δὲ Ἀρσάνης ὁ μετονυμασθῆς Ἀρταξέρξης, and Curtius, vi. 6: *Bessus veste regia sumpta, Artaxerxem appellari se jusserat* (quoted by Pott, *Etym. Forsch.* i. p. lxxv). In Ὀ-ξάθρης (Diod. xvii. 34; Plut. *Artax.* c. i.), the Zend *ksathra* is exactly preserved. The *o* is to be explained like the first syllable of Otanes, which, according to Pott (*Etym. Forsch.* i. p. xxxv), is equivalent to the Sanscrit *su-tanu*, "having a beautiful body," from the old Persian *su*, Zend *hu*, Sanscrit *su*=εῖ, and the Zend and Sanscrit *tanu*, "a body."

(b) Malcolm (*Hist. of Persia*, i. p. 271) translated Satrap "umbrella-carrier." We think this far-fetched, and consider Σατραπῆς to be the nearest approximation a Greek could make to what would be in Persian *kshêtra-bân* (Σατραπηνός; Plut. *Lucull.* xxxi. 4), or in Sanscrit *kshêtra-pâ*, "ruler of the country," for, according to Xenophon (*Cyrop.* viii. 6, § 3), the Satraps were persons οἵτινες ἄρτουσι τῶν ἐνοικούντων (Pott, *Etym. Forsch.* i. lxxviii, and see below, § 213). Here *khsh* is represented by *s* only; comp. *sex* with *khshash*. Similarly, in the root *kship*, "to throw," the initial guttural is left out in the Latin equivalent *sip*- (*in-sip-ere*=*in-jicere*, *dis-sip-are*=*dis-jicere*), but in the Greek ῥίπ-τειν, anciently Ϝρίπ-τειν, as appears from ἔρπει-εν (Pott, *Etym. Forsch.* i. 257; ii. 167), we have *q* substituted for *sh*.

* This is Rawlinson's interpretation; but another analysis of the word has been suggested by Benfey and Oppert; see below, § 479.

(c) The following instances, in which the Sanscrit *ksh* is represented by *cr* in Greek or Latin, have been pointed out by Rosen (*Journal of Education*, viii. p. 345, cf. *Rig-Vedæ Spec. Annot.* p. xi): *kshapâ*, "night," Zend *ksafna*, *ksafne*, *ksapanem*, Persian *shab*, correspond to the Latin *crepusculum*; *kshura*, "the hoof of an animal," to the Latin *crus* (*crur-is*); and *kshpira*, "swift," "quick," to the Greek *κραῖνός*.

From all this we may safely infer that as the numerals "four" and "eight" in the Indo-Germanic languages were fully expressed by the combinations *eka-tvaras*=1+3, and *eka-tvarau*=(1+3)×2, so "six" and "seven" were signified by *eka-tva-eka-tva*=3+3, and *eka-tva-eka-tvara*=3+4.

161 It appears then, upon the whole, very probable that seven of the first ten numerals may be traced to the three primitive pronominal elements. The numerals five, nine, and ten, cannot be derived from the same source.

Although the duodecimal system of notation was forced upon the notice of man by prominent and ever-recurring objects, it must not be forgotten that there was still another mode of counting no less obvious and necessary. We mean the decimal notation suggested by the number of the fingers and toes. That this system of notation should be mixed up with the duodecimal, in suggesting the names of the numerals, is natural enough; and we see such a mixture in the fact that the Romans had two years, one of twelve months and the other of ten. One would fancy, indeed, without any particular investigation into the subject, that the number five would have some connexion with the word signifying "a hand," and the number ten with a word denoting the right hand; for in counting with our fingers we begin with the little finger of the left hand and so on till we get to the little finger of the right hand. In Greek and Latin, especially, it is impossible to overlook the resemblance of *δέκ-α*, *dec-em* to *δέκ-σιος*, *dec-s-ter*; and with regard to *πέντε*, *quinque*, we have already seen (above, § 146) that the *π* of the former is duly represented by the labial included in *qv*, and its Greek representative *ϕ*. The same interchange might be presumed in the second syllables *τε* and *que*, for the identity of which we have abundant examples, and this might seem to be sup-

ported by the dialectical form $\pi\acute{\epsilon}\mu\pi\epsilon$. A more accurate examination, however, ought to convince us that the nq in the Latin numeral is merely the representative of an euphonic nasal which took the place of the original n , for the ordinal is *quintus* not *quinctus*, and the derived proper names (according to the true orthography; see Forcell. s. v. *Quintius*) are *Quintius* (Samn. *Pontius*), *Quintilius*, *Quintilianus*, &c. The change of $\nu\tau$ into $\mu\pi$ in $\pi\acute{\epsilon}\mu\pi\epsilon$, $\pi\epsilon\mu\pi\acute{\alpha}\varsigma$, $\pi\epsilon\mu\pi\acute{\alpha}\xi\omega$, $\pi\epsilon\mu\pi\text{-}\tau\acute{o}\varsigma$, &c. must therefore be regarded as euphonical and arbitrary; and the original form of the fifth numeral in Greek and Latin must have been $\pi\acute{\epsilon}\nu\tau\epsilon$ = $\mathcal{F}\epsilon\nu\tau\epsilon$ and *quinte*; and this view is confirmed by the Greek $\delta\acute{\epsilon}\kappa\alpha$: for we have shown above that $\kappa\alpha$ may represent either $\kappa\epsilon\nu$ or $\kappa\acute{\epsilon}\nu\tau$ (§ 114), and we have just seen that $\delta\acute{\epsilon}$ = $\delta\mathcal{F}\epsilon$. If, therefore, κ in $\delta\acute{\epsilon}\kappa\alpha$ stands for an original $\kappa\acute{o}\pi\pi\alpha$ (above, § 110), the compound must denote “twice-five;” and as we shall show hereafter that $\kappa\alpha$ = $\mathcal{F}\epsilon\nu\tau$ is the root which expresses “a hand,” it will appear that $\delta\mathcal{F}\epsilon$ - $\mathcal{F}\epsilon\nu\tau$ originally meant “two hands,” i. e. the ten fingers held out together.

With regard to the ninth numeral, in Greek at all events, it is difficult to resist the first impression that $\acute{\epsilon}\nu\nu\acute{\epsilon}\alpha$, which must have been originally $\acute{\epsilon}\nu\nu\acute{\epsilon}\mathcal{F}\alpha$, owes its origin to the Greek mode of speaking of the end of a month, as $\acute{\epsilon}\nu\eta$ καὶ $\nu\acute{\epsilon}\alpha$, i. e. “the old and the new.” That the word $\acute{\epsilon}\nu\omicron\varsigma$ (also written $\acute{\epsilon}\nu\nu\omicron\varsigma$ and $\acute{\epsilon}\nu\omicron\varsigma$) means “old” is proved by the gloss $\mathcal{F}\acute{\epsilon}\nu\nu\omicron\varsigma$, ἀρχαῖος (Ahrens, *Dial. Dor.* p. 54), and may be inferred from Aristoph. *Nub.* 1183, where the words $\gamma\rho\alpha\upsilon\varsigma$ τε καὶ $\nu\acute{\epsilon}\alpha$ γυνή are cited to justify the expression $\acute{\epsilon}\nu\eta$ καὶ $\nu\acute{\epsilon}\alpha$. Kuhn (*Zeitschr. f. Vergl. Spr.* II. p. 129) compares the word with *senex*, Goth. *sineigs*, Sanscrit *sana*, and he quotes (*Ibid.* IV. p. 44) passages from the *Védas* in which *sana* is opposed to *apara*, *navya*, *nūtana*, just as $\acute{\epsilon}\nu\omicron\varsigma$ is opposed to $\nu\acute{\epsilon}\omicron\varsigma$. The idea attached to $\acute{\epsilon}\nu\omicron\varsigma$ is that of “just passed, completed,” as in the phrase $\acute{\epsilon}\nu\alpha\iota$ ἀρχαί, αἱ παρωχθέναι (Harpocrat.); and it seems to us, that $\acute{\epsilon}\nu\iota\alpha\nu\tau\acute{o}\varsigma$ means simply $\acute{\epsilon}\nu\iota$ - $\mathcal{F}\acute{\epsilon}\tau\omicron\varsigma$, “the past or completed year.” In this sense $\acute{\epsilon}\nu\nu\acute{\epsilon}\mathcal{F}\alpha$ = $\acute{\epsilon}\nu\nu\acute{\epsilon}$ - $\mathcal{F}\epsilon\nu\tau$ will mean “the last of the completed hand,” before the two hands were held up together. At any rate Plato seems to have recognised the possibility of $\acute{\epsilon}\nu\omicron\varsigma$ τε καὶ $\nu\acute{\epsilon}\omicron\varsigma$ being respresented by $\acute{\epsilon}\nu$ - $\nu\epsilon\omicron$; for it is idle to correct his intentionally ludicrous compound $\sigma\epsilon\lambda\alpha$ - $\acute{\epsilon}\nu$ - $\nu\epsilon\omicron$ - $\acute{\alpha}\epsilon\iota\alpha$, in the *Cratylus*, 409 B,

where the philosopher explains it as meaning *ὅτι σέλας νέον τε καὶ ἔνον ἔχει ἀέ.* And it may reasonably be inferred that the orthography *ἐν-νος*, which some critics reject, has arisen from the constant combination of *ἐνος* and *νέος* to signify the last day of the month. This must at all events be the meaning in the line of Hesiod, *Op. et D.* 408: *μηδ' ἀναβάλλεσθαι ἐς τ' αὔριον ἐς τ' ἐννηρι*, where it denotes the last of an assumed period, *i. e.* three days. This explanation of the ninth numeral must of course be limited to the Greek language. But the Latin, Sanscrit, and Teutonic *novem*, *navan*, *niun*, admit of an explanation which involves the same idea, though it implies a slightly different origin. For we agree with Bopp and Benary in referring those names to the adjectives *novus*, *nava*, *niujis*, *i. e.* "new," and the interpretation of their use is simply this—that "nine" can only be contemplated with reference to preceding numbers, and as something later, subsequent, and *new*. In the Lithuanian and Selavonian languages no doubt this numeral has immediate reference to the succeeding "ten;" thus *de-wyni* means "therefrom one" (like the Latin *do-drans*=*de-quadrans*); and Pott proposes (*Zählmethode*, p. 142) to consider the Sanscrit *navan* as a compound of *na*, "not," and *van*=*ûna*, "diminished," which seems self-contradictory.

On these and kindred subjects Lepsius has collected a great deal of valuable information combined with much ingenuity and acuteness: and though we disagree with him on many points we think it right to give our readers an opportunity of judging for themselves, and therefore subjoin an extract from the essay to which we have referred above*.

162 "It is not difficult to perceive," says our author†, "that the same stem [*i. e.* that of *five*] recurs in the number 10 of the Indo-Germanic languages; it is preserved most entire in the Latin *de-cem*. The final *m*, which has fallen off in the nominative of the Sanscrit and Zend *da-ça*, shows itself still in the declension, and therefore may be supposed in the original form of the Greek *δέκα*. In the Gothic *taihun*, the *k* is changed into *h* according to the usual law: in this it differs from

* Dr. Richard Lepsius, *Zwei vergleichende Abhandlungen*. Berlin, 1836.

† p. 116.

the form admitted in *fîmf*, without, however, justifying any doubt as to the identity of the two forms. Moreover, we find the Gothic form *hun*, with an addition of *d* (see Grimm, II. pp. 231, 232), in the compounds *sibun-têhund*, 70; *ahtau-têhund*, 80; *niun-têhund*, 90; in which we find *têhund* as an equivalent to *taihun*. Indeed both forms are combined in *taihun-têhund* = $10 \times 10 = 100$, and it is not till the combinations which follow, *tvā-hunda*, 200; *thrija-hunda*, 300; &c., that the simple form *hunda* appears, in which of course we must recognise the same stem as in *tai-hun* and *tê-hund*. It is certain, from a mere comparison, that *hunda* is again found in *centum*, *tvā-hunda* in *du-centi*, &c. The radical *m* or *n* is thrown out, as is frequently the case before *t*, in the Sanscrit *çata*, for which *êka-çata* is also used (compare *ἐκατόν*). As *hunda* reappears in the tens, so also we have *centum* in *(d)vi-ginti*, *tri-ginta*, &c.; and although the *n* has fallen out in the Greek *ἐκατόν*, it is preserved in *τριά-κοντα*, *τεσσαρά-κοντα*; it has fallen out only in *(dF)έλκατι*; the ordinary Attic form *ἐλκοσι* has gone still farther, and has softened *t* into *s*; so also in *δια-κόσ-ιοι*, *τρια-κόσ-ιοι* (comp. the Beot. *δια-κάτ-ιοι*, &c.), and in the Latin ordinals *vi-ces-imus*, *tri-ces-imus*. In these, therefore, the same stem appears as *çog* and *ces*. In Sanscrit the *n* is quite dropt in the tens also: *vin-çati*, 20; the three following have lost the *i* also; *trin-çat*, 30; *chatvârin-çat*, 40; *pañchâ-çat*, 50; in the following *çati* loses its first syllable, and *ti*, originally nothing but an affix, alone remains: *shash-ti*, 60; *sapta-ti*, 70; *açî-ti*, 80; *nava-ti*, 90. It is precisely the same in Zend, except that 30, 40, 50 are formed with *çati*, instead of *çat*; those which follow however also take *-ti*. With regard to the Gothic we have only the additional remark to make, that we find in the first four tens *tvai-tigus*, *thrija-tigus*, *fidvcr-tigus*, *fîmf-tigus*, a third form *gus* of the same stem: this comes very near the Greek *çog*, and has besides retained the softened guttural instead of the *h*. Thus we find in the Gothic the remarkable phenomenon of one and the same stem, which is written *fîm* in 5: *hun* in 10 and the higher tens, and *gu(n)* in the lower tens: and it is the business of definitive, and, at the same time, extensive comparisons, like those which are possible in the numerals, to establish such facts as must necessarily be exposed to objections, when the investigation is confined within the limits of a single language.

“How then are we to interpret this widely-diffused stem, which we see recurring in the five, the tens, and hundreds of all Indo-Germanic languages? We observe that this stem contains precisely the most essential numbers of the decimal system. In general, how have mankind arrived at the decimal system, which is so inconvenient for all minute reckoning, and especially for division? and yet the earlier

the period, the less was the occasion for large numbers, in which the fundamental system becomes less important. Finally, why did they not go back to the number 5, the lowest basis of the decimal system? We find both systems together among the aborigines of America, as well as among the most polished nations of all ages. Whence came this decimal system which has everywhere taken its place by the side of the far more natural duodecimal system? From what else but from the 10 *fingers of the two hands*, on which every child at the present day begins to count?

"In this simple consideration we must be struck with the surprising resemblance between *hunda* and *handus*, the hand, in Gothic: in fact, a narrow scrutiny of both stems, which we will now attempt, will easily convince us that this similarity is not merely external and accidental, but that the two words are etymologically one and the same.

"*Handus* is immediately connected with *hinthan*, *capere**, which we also find in the isolated, and, I might almost say, Germanized form *pre-hendo*. Grimm (*Gr.* II. p. 35) is quite right in also referring to this stem *hund-s*, *canis*, the catcher, *qui capit feras*. In this too we see that in the whole stem *d* is really nothing but an affix, of which Grimm (II. pp. 231 foll.) has very fully treated: for *hund-s*, with the usual changes, but without *d*, is found in the Greek *κυν-ός*, Latin *can-is*, Sanscrit *çvan* (gen. abl. *çunas*, dat. *çun-ê*, instrum. *çun-â*, locat. *çuni*, nom. pl. *çvâ*, accus. *çvân-am*). We find the same stem in the Homeric form *γέν-το δ' ἰμάσθλην*, which points to an ancient form *γέν-ειν*, instead of *ἐλεῖν†*. As *hund-s*, *canis*, refers to the stem *hun*, Greek *κυν*, Latin *can*, similarly we may trace also *hunda*, *centum*, to the stem *hun*, Latin *cen*, Greek *κον*. Consequently, both stems

[* *Hente*, which so often occurs in Chaucer, is the same word.]

† "Buttmann is unquestionably right in comparing *γέν-το* immediately with *ἐλετο*, just as the Æolic form *κέντο* for *κέλετο* is adduced from Alcman. It is this transition from *n* to *l* which prevents us from recognising the stem *hinthan* in the Greek language. We find the same stem with *r* for *l* in the Sanscrit *hri* (*capere*), to which belong *hasta* (*manus*) (see Burnouf, *Yagna*, Tom. I. p. lxxxi, and note H), Latin *hir*, Greek *χείρ* and *αἰρέειν*, also, with an addition of *p*, *κάρ-πος* (the wrist), *carpus*, *ἄρ-πάξεν*, Gothic *hreiban*, *greifen* (see Grimm, II. p. 45); nay, as it appears, also in the Sanskrit *kara* (*manus*), and consequently the whole wide-extended stem *kri*, the general signification of which (*facere*) cannot be the original one. The stem *hri*, as we must infer from the letter *h*, which is always a later one, cannot represent an original form, but we must always seek for this in *kri*, which therefore corresponds to *kri*, *facere*. 'That which is identical as far as the letters are concerned cannot be diverse as concerns the meaning' (see Grimm, II. pp. 76 foll.). The stem of *manus* is different, though it is probably connected with the Sanscrit *pāni*, the hand, and with the Greek *μην-ύω*, *mon-stro*."

are identical even in this form. An *u* in a stem, as in *hund*, *κυνός*, often points to an original *v*, which in this case brings us nearer to the stem *kvan*. In fact we still find both consonants in the Sanscrit *çvan*, dog, Zend *çpan**; we must therefore in the case of *canis* also suppose an older form *qvanis*. Just so the stem of the number 5 was originally *kvam*; only in this word the *m* is still preserved, as might be established by certain forms (*πέμπε*, *fimf*), though in most words expressing this numeral the *m* has been softened into *n*. This *m* is probably a softening of *p*, which we still find in *cap-ere*, the connexion of which with *can-is* is as certain as that of *hinthan* with *hunds*. Lastly, we find the same stem in the Hebrew *qômez*, 'the full hand,' *qâmaz*, 'to take,' *kaf*, 'the hand,' and in the Coptic *çop* (*capere*), whence comes *çig*, 'the hand.'

"So much for the stem from which *hunda* and *handus* are derived. It appears to me fully established, that, in all the languages referred to, the number 5 was expressed by the hand with its 5 fingers, and was thus made the simplest and most obvious basis of the old system of numeration. The Greek word *πεντάξειν* means what we call 'counting on the fingers.' It was possible, however, when the one hand was finished to go on with the other, and thus a higher unity was naturally made of the number 10; so that instead of the quinary scale, which is still in use among some nations, they formed a scale of which the radix was 10. There are people in America who count with their feet, and have thus arrived at the still higher radix 20†.

"It is clear that, if the principle of continued composition of the same elements was applied to the higher numbers, it would soon lead to forms of intolerable length. Even the simple numbers up to 10 are abridged and mutilated in a most violent manner. We should expect to find the same in the higher numbers formed on the digit system, though in Gothic we may still point out this system in almost its original completeness, for in this language the outward similarity of *hunda* and *handus* seems to have preserved the feeling of their identity for the longest period, while in other languages this feeling was sooner lost because they had no form for *handus* so similar to that for 100.

"In the number 5 we find not only no mutilation, but even a reduplication of the stem‡. The Latin is the only language in which

* "See Burnouf, *Χαχνα*, I. p. lxxii, and comp. Herodotus, I. 110: *τὴν γὰρ κύνα πάντα καλέουσι Μῆδοι*."

† *Voyage de Humboldt et Bonpland*. Ière Partie, à Paris, 1810, p. 193.

‡ Bopp and Benary think that the last syllable of the numeral five in

we find traces of the simple stem, namely in *quim-atus*, *quin-i*, *quin-io*, *quin-arius*, *quin-decim*, *quin-genti*, &c.: perhaps also in the old Norse *fimm*, Danish and Swedish *fem* (see Grimm, I. p. 762), unless these forms have arisen from a mutilation which seems to be indicated by the double *m* in the old Norse.

"In *taihun*, 10, we easily recognise *twai* with an omission of the *v*: 'two hands.' Just so in *da-čan*, *decem*, δέ-κα.

"In *tvái-ti-gus*, 20, 'twice two hands,' the first *tvái* is still entire; *ti* is a further mutilation of the *tai* in *tai-hun*. We find that in the other languages even this *ti* has fallen out. Instead of (*d*)*vi-çati*, we ought to have (*d*)*vi-da-çati* from *da-ça*; instead of *dvi-ginti*, *dvi-de-ginti*; instead of εἰ-κατι, εἰ-δέκατι.

"The same relation remains in *thrija-ti-gus*, '3 times 2 hands,' *fid-vôr-ti-gus*, '4 times 2 hands,' *sibun-tê-hund*, '7 times 2 hands,' &c.

"In Gothic the number 100 is written at full length *taihun-tê-hund*, '2 hands×2 hands.' But this exactness does not extend farther in Gothic; instead of the difficult composition *taihun-tê-hund*, the following hundreds return to the simple stem, and we have *tva-hunda*, 200, instead of *tvái-ti-gus-tê-hund*. In the other languages, as also in the later dialects of the Germanic language, the simple stem is put for 100, and only distinguished by the ending, so that ἑκατόν properly signifies 'one hand,' and as far as the letters are concerned, *du-centi* and *dvi-ginti* are perfectly identical, and denote 2 hands, just as *tái-hun* does.

Sanscrit, Latin, and Greek', is the copulative conjunction, and that the nasal, which, in Sanscrit and Zend, appears at the end of this numeral, is a later excrescence. Bopp (*Vergl. Gramm.* p. 443) considers *pañ-cha* as signifying "and one," the first syllable being the neuter form of *pa* which appears as the number "one." Benary remarks (*Berl. Jahrb.* July 1833, p. 48), that *pañ-cha* is easily explicable as a mutilation of *pāñi-cha*, "and the hand," because with this number they began to count with the other hand; and he thinks this derivation confirmed by a comparison of *pañ-cha*, *quinque*, and *πέν-τε*, the last syllable in each being the regular conjunction in each language. This last suggestion is not to be despised; but if the termination of these words is the conjunction, it implies simply that after counting four the whole hand was opened and held up.]

* "Grimm (*Gr.* II. p. 17) is perfectly right in connecting the following words: Gothic *teihan* (*nuntiare*, *dicere*), old High German *zihan* (*accusare*), *zeigôn* (*indicare*), *zêha* (*digitus*, i. e. *index*); Gothic *taihun*, old High German *zêhan* (*decem*), Gothic *tigus* (*decas*, *numerus index*), &c. A confirmation of this will appear in the following development.

"In counting with the fingers one naturally begins with the left hand and so goes on to the right. This may explain why in different languages the words for the *left* refer to the root of *five*, those for the *right* to the root of the *ten*, and why expressions like *finger*, *fangen*, *zeigen*, *zählen*, refer sometimes to 5, and at other times to 10. To omit any strict development of the ideas,—that there is a connexion between 10 (the second

"Lastly, in Gothic the word *thūsundi*, 1000, seems to refer to this stem, and appears to be composed, how we know not, of *taihun hundi**.

"I subjoin here the explanation of the Indo-Germanic expression for 9, which is also, I think, though not so distinctly, derivable from the stem *kvam*. It has here, as in *πέμ-πε*, *fimf*, old High German *vinf*, thrown off the *k*, and appears as *vam*. We start here from the Greek *ἐννέα*, which stands for *ἐν-φενάμ*, as we see from *novem*, *navan*, *nium*. The Greek form is distinguished by the prefix *ἐν-*, which is wanting in the other languages. In this we are immediately reminded of *ἐκατόν*, which appears more entire in the Sanscrit *ēka-ṣata*, 'one hundred.' There is a form *ēkôna* or *-îna* peculiar to the Sanscrit (originally it was *ēka vinâ*, 'one without,' 'one less') which subtracts one from the

hand) and *the right hand*, appears from the words: Sanscrit *daśa*—*dak-sha*, *dak-shina*; *δέκα*—*δέν-σιος*; *decem*—*dec-ster*; Gothic *taihun*—*taih-s-vô* (on the derivation in *vô*, see Grimm, II. p. 189), old High German *zēhan*—*zesō*, *ze-se-wa*, old High German *zeswe* (*dexter*). All the languages have also formed from this a distinct feminine substantive, to signify the right hand. This transition to the idea of the right hand will enable us to understand how the ideas of pointing, taking, directing, could proceed from the same root: Sanscrit *diṣ* (*mon-strare*), *δείκ-νυμι*, *δέν-ομαι*, *dic-ere*, *in-dic-are*, *in-dec-s*, *dig-nus*, &c., Gothic *teihan* (*accusare*), *zeig-ôn* (*monstrare*). Let it be observed here, how these verbal roots preserve, by abbreviation, an appearance of simplicity and originality which by no means belongs to them: this is a phenomenon of frequent occurrence, which has been hitherto but little attended to. Language, like the Indian fig-tree, lets its branches sink into the ground again, all round its root, and these strike root afresh and become new stems, like the old one, whose relative originality can only be estimated according to the degree of their removal from the common middle-point. From *δέκα* is farther derived *δάν-τ-υλος*, from *decem*, *dig-it-us*, and from *zēhan*, *zēha* (the toe). Lastly, we refer to *taihun*, the old High German *zēhan*, also old Norse *ta-la* (instead of *tahi-la*), old High German *za-la*, *zähl* (number), *zalôn*, *zählen* (to count), just as *πεμπίζειν* comes, though with still greater clearness, from *πέμπε* (5), and just as the Sanscrit *gâtai* (*numerare*) is derived from *ṣata* (100)."

[We do not translate the remainder of the note, which seems to involve some precarious comparisons. For instance, we cannot agree with Lepsius that *sinister* and *ἀριστερός* ought to be connected with the old High German *vinstar*. On the contrary, it seems infinitely more natural to conclude that, as in the phrase *ἐπ' ἀσπίδα*, "to the left," so in *ἀριστερός* we allude to the weapon of defence carried on the left arm, so that the root will be that of *φόρος*, *φασγῆ*, *φήρως*, &c., Germ. *war*, *wehren*, &c. (Graff, I. p. 906), Sanscrit *vri*, Welsh *gwared* (Garnett, *Essays*, p. 233), &c. Similarly *sinis-ter* refers to the *sinus togæ*, which was on the left hand (Pott, *Zählmethode*, p. 139)].

* "Just as there is a break after *taihun têhund* and a return to the simple *hunda*, the Romans, when they got beyond 100,000 in their money reckonings, left out this sum and said only *decies æris*, instead of *decies centena millia æris*, and *sestertium* was in the reckoning equivalent to 1000 *sesterti*, when it was joined to *decem*, *undecim*, &c., and to 100,000 *sesterti*, when connected with *decies*, *undecies*, &c."

number which follows: *ékóna vinçati* or *ûna vinçati*, 19. Similarly, there might have been an *ékóna daçan* or *ûna dacan*, for 9; the *da* fell out, as in *vinçati* for *vin-da-çati*, and there remained *ékóna-kan* or *ékónavan*, which corresponds to the Greek *ἐννέφαν* or *ûnavan*, which by dropping the *û* becomes *navan*, *novem* and *niun*."

This disquisition anticipates all that remained to be said on the tens and hundreds.

163 The words *χίλιοι*, 1000, and *μύριοι*, 10,000, are merely expressions for large but indefinite numbers, like the Latin *mile*, i.e. *m-ile* = *δμ-ιλία*, "a great crowd;" whence *miles* (*mil-it*), "one who goes in or belongs to a large body" (cf. *equ-es*, *ped-es*, *cochl-es*, &c., and see *Varron*. p. 24). The connexion of *χίλιοι* with *χίλος*, "a heap of fodder," is self-evident: and it is equally clear that *χίλος* is connected with *χέω* (*χέω*), just as *χειλος* is with *χάω* (*χάω*), and *καυλος* with *καίω*, *κάω*, *καύω*. That it has nothing to do with the words *χλοή*, *χλωρός*, &c., as Pott supposes (*Etym. Forsch.* i. p. 141), is shown by the length of the first syllable. The intimate relationship in meaning which subsists between *χέω* and *χίλος* will be felt by any one who reads such passages as *Odyss.* xi. 588: *δένδρεα δ' ὑψιπέτγηλα κατάκρηθεν χέε καρπόν*. The same is the case with *μύριοι*, which, with a difference of accentuation, is used in the best writers in a general and indefinite sense. Thus we have *μάλα μυριοί*, "a great many," *μυρία σπουδή*, "excessive eagerness" (see *Buttm. Ausführl. Sprl.* § 70, *Anm.* 15). This word is connected with *μύρω*, a verb which expresses the falling of water, and is especially applied to a flood of tears. Compare *Hesiod*, *ἀσπ.* *Ἡρακλ.* 132: *πρόσθεν μὲν θάνατόν τ' εἶχον καὶ δάκρυσι μῦρον*, with *Soph. Œd. Col.* 1253: *δι' ὀμματος ἀστακτὶ λείβων δάκρυον*. The derivation of the idea of a large number from the sight of water falling in infinite drops is too obvious to require any remark.

164 We must now turn to the ordinals, and, in discussing them, we will include an inquiry into the modes of expressing a superlative common to the Greek and cognate languages; an inquiry which might indeed be postponed to the third book, but which may be conveniently discussed in this chapter, as the com-

paratives have also been touched on here, and as this will give us an opportunity of explaining three words intimately connected with the numerals—μέσος, ἡμισυ, and ἄλλος.

It has been mentioned that the ordinal of the second number is δεύ-τερος, and it will be observed that this word contains the comparative suffix -τερος explained above. This comparative suffix is, as we have seen, from its origin peculiarly adapted to the expression of a relation between *two* persons or things, especially of the relation between *farther* and *nearer*. Hence, the ordinal of the number two would naturally be expressed by affixing to that numeral this comparative termination, for in that case a relation between two only is implied. But when the relation of nearness is applied to one out of a greater number, we find that a different termination is affixed, and δεύτετος is the word used when we are speaking of the nearest out of a given series, that is, "the last," considering them as in a state of motion from the *terminus in quo*. Now the ending -τατος is the most common of those which are used to express the superlative degree in Greek. That this form, however, is an arbitrary extension appears from the following considerations: there is obviously an appended τος in the epic forms ἐβδόμα-τος, ὀγδό-ατος compared with the common ordinals ἐβδομος, ὀγδοος; there is clearly a reduplication in τρί-τατος by the side of τρί-τος; the form -τατος is never found in the cognate languages; it does not appear in those Greek superlatives, in which there is still a trace of the included adverb (for even πρώτος makes πρώτισ-τος and not πρώ-τατος; see below, § 167); and, with two casual exceptions (δευτατος and τρίτατος) it does not serve as the ending of the Greek ordinals. For the ordinals in the common Greek writers are πρώτος (or πρότερος when only two are spoken of), δεύτερος (or δευτατος when more than two are spoken of), τρίτος (rarely τρίτατος), τέταρτος, πέμπτος, ἕκτος, ἑβδομος, ὀγδοος (or ὀγδοφος, as the analogy of the Latin *octavus* would lead us to infer), ἔννατος, δέκατος, &c., εἰκοστός, &c., ἑκατοστός, διακοσιοστός, &c., χιλιοστός, μυριοστός. In all these, except ἑβδομος, ὀγδοος = ὀγδοφος (which, like *octavus*, exhibits *v* for *m*; cf. δράω, δραπέτης, δρόμος*), the termination is τος. The same termination is found in the Sanscrit *chatur-thas*, *shash-thas*, and in the Latin *quartus*,

* On the change of *m* into *v* see Kuhn, *Zeitschr. f. Vergl. Sprachf.* VII. I, p. 80. In Slav. we have *osmyi* and in Lith. *aszmas* for *octavus*, where the *m* is retained. Grimm (*Deutsch. Gramm.* III. 640) considers that the full form *tam*, *tim*, or *tom* is really retained in *sap-tamas*, *sep-timus*, ἑβδομος = ἑπ-τομος, and in *ash-tamas*, ὀγδοος = ὀγδομος = ὀκ-τομος.

quintus, *sextus*; all the other Latin ordinals, except *secundus* (which is merely the participle of *sequor*), *octavus* (for *octimus*), and *nonus* (for *novimus*), end in *-mus*, an equivalent to which is found in the Sanscrit *pancha-mas*, *sapta-mas*, *ashta-mas*, *nava-mas*, *daca-mas*. As the endings $\mu\omicron\varsigma$ and $\tau\omicron\varsigma$ can have no connexion with one another, we must conclude, either that the meaning of the superlative and ordinal might be equally expressed by the simple elements $\mu\omicron\varsigma$ and $\tau\omicron\varsigma$,—that is, they both imply that the thing specified is the last of a series ending with the speaker or the object specified,—or they must be fragments of a compound affix capable of expressing that relation. We cannot recognise the necessary meaning as common to two elements so distinct as $\mu\omicron\varsigma$ and $\tau\omicron\varsigma$, and must therefore fall back on the other supposition; and comparative philology furnishes us with a form containing both of them. The common Sanscrit terminations for the comparative and superlative are *-tara*, *-tama* (Latin *-timus*), but the Sanscrit and Latin forms of some pronominal developments show that $\mu\omicron\varsigma$ and $\tau\omicron\varsigma$ have the same value as *-ta-mas* or *-ti-mus*. Thus we have *pra-thama* by the side of *pri-mus*, and $\pi\rho\acute{\omega}\text{-}\tau\omicron\varsigma$ or $\pi\rho\acute{\omega}\tau\iota\varsigma\text{-}\tau\omicron\varsigma$; *eka-taras* and *eka-tamas* by the side of $\acute{\epsilon}\kappa\acute{\alpha}\text{-}\tau\epsilon\omicron\varsigma$ and $\acute{\epsilon}\kappa\acute{\alpha}\varsigma\text{-}\tau\omicron\varsigma$; *ka-taras* and *ka-tamas* by the side of $\pi\acute{o}\text{-}\tau\epsilon\omicron\varsigma$ and $\pi\acute{o}\varsigma\text{-}\tau\omicron\varsigma$; *ya-taras* and *ya-tamas* by the side of $\delta\pi\acute{o}\text{-}\tau\epsilon\omicron\varsigma$ and $\delta\pi\acute{o}\varsigma\text{-}\tau\omicron\varsigma$. The Latin superlative ending is *-timus*, as in *op-timus*, “uppermost” (from *ob*), *in-timus*, “innermost” (from *in*), and this termination is universally assimilated in the superlatives of ordinary adjectives, as in *duris-simus* for *dured-timus*, cf. *ses-sum* for *sed-tum* Varron. p. 329). But the Latin language has not only ordinals in *-mus* like *primus*, and in *-tus* like *quartus*, but it has superlatives also in *-mus* like *extre-mus*, *postre-mus*, *infi-mus* or *i-mus* and *sum-mus* for *supi-mus*. The simplest explanation of these interchanges is the application to the consecutive syllables *ta-ma*, of the principle, which explains the divergency of articulation from a combined sound in a single syllable (above, § 121). Now *-ta-mas* would imply “motion from there to here,” so as virtually to coincide with the second position, as appears from the force of such a word as *fini-timus* (above, § 130). And while the full combination *ta-ma* seems necessary to give the requisite signification of the ordinal and superlative, namely, the last term in a series ending with the specified person or object, there are several indications of the manner in which the two syllables might have collapsed into one. The loss of the *m* and the representation of the whole syllable by *ta-s*, $\text{-}\tau\omicron\varsigma$, *-tus*, is explained by a comparison of *ashtamas* with *octavus* and ὀγδοός. And the substitution of *ma-s*, $\mu\omicron\varsigma$, *-mus* for the full termination *ta-ma* is supported by the analogy of comparative forms, in which we have *ra* alone for *-tara*.

Thus we have *adha-ra* "lower," as well as *adha-ma* "lowest*;" *δα* is used as well as *ᾶ-ρα*; and the adjectives in *-ra*, *-ρος* have undoubtedly a comparative or relative value (see below, §§ 167, 204). If this conclusion is valid, *-μος* and *-τος* are only portions of the full termination *ta-ma*, and *-τατος* is merely a reduplication of the latter. The force of the termination *-τος*, as it appears in the ordinals, is easily shown by a few examples. We have Hom. *Od.* xxiv. 289: *ποστὸν δὴ ἔτος ἐστίν* by the side of (v. 308): *τόδε δὴ πέμπτον ἔτος ἐστίν*. In Aristotle, *Pol.* ii. 3, § 5, we have *ἐκαστος ἐμὸς λέγει τὸν εὖ πράττοντα τῶν πολιτῶν ἢ κακῶς, ὁπόστος τυγχάνει τὸν ἀριθμὸν ὦν*, "as each one out of the number is prosperous or the reverse, each one of the citizens will claim or repudiate him as his son, whatever may be the number of which he forms one." And generally we have the word *πολλοστός*, which means "one taken out of many," and hence, by a very natural transition, "very small;" for, when a given whole is divided into many units, the smallness of the units will of course depend on the number of them. The word also signifies "the last of a long series," as in Aristoph. *Pax*, 559:

ἀσπάσασθαι θυμὸς ἡμῖν ἐστὶ πολλοστῷ χρόνῳ,

i. e. "after so long a time," "in the last of so long a series of years;" the converse of which is *ὀλιγοστός χρόνος* (Soph. *Antig.* 619). These meanings arise naturally from the signification which we have given to the affix, and we do not know of any other means of explaining the word. We have also a very striking proof of the correctness of this view in the ordinary use of the superlative in Greek, where we should expect a comparative according to our idiom. Thus we have in Æschylus (*Persæ*, 180): *ἐδοξάτην μοι δύο γυναικ' εὐέλμونه—εἰς ὅψιν μολεῖν—μεγέθει τῶν νῦν εὐπρεπεστάτα πόλν*, where these two visionary women are supposed to be the first of a series including all the actually existing women, with whom they certainly would not be classed were there not something in the nature of a Greek superlative which renders a construction like this necessary. The same also appears from the common Greek idiom *πεμπτὸς αὐτός*, "with four others," &c.

165 Although the Greeks generally expressed the comparative by *-τε-ρος*, there was another method which they adopted most frequently in the case of dissyllabic adjectives terminating in *-ρος* or *-υς*. This was by affixing the termination *-ων*. There was, however, a great difference in the etymological structure of these and the other

* Bopp divides these words *a-dhara* and *a-dhama* (*Demonstrativstämme*, p. 9); but the formation indicated in the text is supported by Pott (*Etym. Forsch.* i. pp. 61, 254, 2nd ed.).

comparatives. For while the termination *-τε-ρος* is appended to a fixed case or adverbial inflexion of the positive, the suffix *-ων* = *ιον-ς* is added, like other formative adjuncts, to the crude or uninflected form of the noun. This fact, which we first pointed out in another place (*Gr. Gr.* Art. 269 sqq., cf. *Varron.* p. 328), explains all the peculiarities in the form of the syllable immediately preceding *-τερος*, in which the traces of the original adverb are more or less distinct according to the influence of euphonical and other like considerations. The quantity of *-ων* is variable, the first syllable being short in the old epic poets, and long afterwards; in this variableness it stands between the analogous Sanscrit terminations *-īyas*, *-īyāns*, and the Latin *-ior*, one of which has the first syllable always long, and the other always short. Some of the comparatives thus formed admit of an anomalous contraction, which requires some notice. Thus *ταχύς* makes comp. *ταχίων*, superl. *τάχιστος*, but *ταχίων* is often contracted into *θάσσω*, neut. *θάσσω*. Similarly *βαθύς* makes *βάσσω*; *βραδύς*, *βράσσω*; *γλυκύς*, *γλύσσω*; *μακρός*, *μάσσω*; *παχύς*, *πάσσω*. To these may be added *ᾄσσω* from *ἄγχι*, and *μᾶλλον* from *μάλα*. In all these cases there has been a process of assimilation, like that which has taken place in the barytone verbs in *-σσω**. In the case of *θάσσω*, *γλύσσω*, *μάσσω* and *πάσσω*, there has been an assimilation of the *κ* sound, the aspirate in the first word being transferred from the end to the beginning of the syllable, according to a principle before explained. The second letter in all these words is a representative of the *ι*, as is also the case in *ἄλλος*, *alius*, *μέσσος*, *medius*, *φύλλον*, *folium*. From the accentuation of *ᾄσσω*, *θάσσω*, and *μᾶλλον*, it may be inferred that in Attic at least the first vowel is long by nature, and it may be doubted whether these words ought not to have the *iota subscriptum*, the *i* being transferred to the first from the second syllable, as is indeed clearly the case in *κρείσσω*, *μείζων*.

To ascertain the meaning of this comparative suffix, we must recur to what was said in the last chapter on the connexion of the Greek and Sanscrit terminations—*ιος*, *īya*. It appears that these endings express a quality or relation, and so differ from the comparative-ending only in this, that the comparative properly denotes a relation between two only, whereas these terminations express a relation generally. There is reason, therefore, to believe that these terminations are only weaker forms of the comparative ending in *-ων*, just as the terminations of *med-ius*, *al-ius*, clearly relative words, are only slight variations of the comparative-endings in *-ior* (more anciently *-ios*), neuter *-ius*. In fact, as we shall show in a subsequent chapter, the original form of the

* See Book III. chap. I, and Book IV. chap. 4.

genitive was *-ιον* = *-σιον*, which was more usually apocopized into *-ιο*, and as the qualitative adjectives in *-ιος* were derived from the latter, so the comparatives in *-ιων* = *-ιον-ς* were inflexions of the former. The meaning of the ending *-ιων* is quite in accordance with this derivation. It does not imply excess, like the suffix *-τερος*, but only a considerable amount of the quality indicated by the adjective—rather more than less—and this is often the force of the adjectives in *-ιος* and of the Latin comparatives in *-ior*, which may be added to formations in *-ter*; cf. *dex-ter-ior*, *ex-ter-ior*, &c. We recognise the same force in our ending *-ish*, as *brack-ish*, “rather salt than otherwise.”

166 The word *medius* is perfectly analogous to *ἴδιος*; the first syllable of *medius* is the first personal pronoun, just as the first syllable of *ἴδιος* is the third. The word “middle” expresses that the subject, the *here*, is considered as equidistant from two other localities, and is therefore properly expressed by a variety of the first personal possessive pronoun. The possessive in Sanscrit is written *madiya*, and the word signifying “middle” is *madhya*. In Greek the *dh* or *th* of the Sanscrit is assimilated into *σ*, as in *σιός* from *θεός*, and the *i* or *y* is represented by the second *σ* of *μέσσος*, an assimilation which we often find. We do not hesitate to recognise this word in the second part of *ἡ-μῖν*. The first part bears the same relation to *διά*, Latin *di* (*di-midius*, “through the middle”), that the first syllable of *ὕ-μεις* does to *δύο*. The same preposition also appears in the first syllable of *ἡ-μέρα* and *ἡ-μέρος* (§ 150). By an assimilation very like that which has taken place in *μέσσος* for *μέδιος*, we have *ἄλλος* for *ἄλιος*, with the same ending signifying quality or relation. This is clearly identical with the Sanscrit *anuya* (for *aniya*, from *ana* the demonstrative) and the Latin *alius*. The interchange of the liquids *l*, *n*, in Greek and Sanscrit, is well known; it is also common among the dialectical varieties of the Greek language itself (Buttmann, *Ausf. Sprachl.* Vol. i. p. 74). If the connexion between *ἄλλος*, *alius*, and *anya* is admitted, we cannot hesitate about referring to the same origin the Latin distinctive pronoun *ille* or *ollus*, which stands therefore for *inia* or *inius*, and differs from *alius* = *anius*, only as the Latin prefix *in* differs from the Greek *ἐν*; cf. *ἐν-ήριθμος*, *in-numericus*, &c.; and as *ἐν* = *ἐν* is only another form of *κεν* (below, § 183), *ἄλλος* = *ἐάνιος*, and therefore *alius* = *ille*, may be regarded as identical in origin no less than in signification with *κεῖνος* = *κένιος* (above, § 135). We see the original *n* in the Umbrian *hon-dra* = *ul-terior*, *hon-domu* = *ul-timus*, which must be compared with our *yon*, *yon-der*, *be-yond*, the Gothic *jains*, *jaind*, N. H. G. *jener*, &c. (Varron. p. 315). The *u* of *ul-lus*, *ul-tra*, &c. is merely a result of the contact with *l*: see *Varronianus*, pp. 250, 266.

The long *o* of *olim* is confined to those cases where one of the liquids is absorbed (*Varron.* p. 201). In ἀλλήλων (from ἄλλοι ἄλλων) one of the λ's is absorbed in the long vowel, just as the *i* is omitted in *sōlus* formed from the separative particle *se* and *alius*. The Sanscrit synonym *anyōṇya* = *anya-anyā* is melted down into one word in a somewhat similar manner.

It may be objected to this resolution of μέσος and ἄλλος into forms so analogous to the qualitative ending in -ιος on the one hand, and the comparative in -ίων on the other, that there is actually a form of ἄλλος (ἀλλοῖος) ending with the former affix, and a comparative of μέσος, namely, μεσαίτερος (superl. μεσαίτατος). With regard to ἀλλοῖος we have only to say that a reduplication of the ending would be quite in accordance with the analogy of the Greek language, even though we were not entitled to suppose that this elongation took place after the word had, by assimilation, lost the outward features of its original form. In Sanscrit *an-ya* and *an-ya-tara* are synonyms for "other," "different." In fact ἄλλος is rather a distinctive word, than a comparative like ἕτερος: thus the grammarian says (*Bachm. Anecd.* ii. p. 376, l. 4): ἄλλος μὲν ἐπὶ πλειόνων λέγεται καὶ ἐπὶ ἀλλοῖον κατὰ τὸ εἶδος, ἕτερος δὲ ἐπὶ δύο. The same may be said of μεσαίτερος: for although μέσος, *medius*, have unquestionably a comparative meaning, yet, in the general use of the word, it may have become necessary to have a separate form to express more strongly that one of two objects was nearer to the middle point than the other. In Sanscrit, *madhya* has a superlative *madhyama*, like the Latin *mediocrimus*. We have before remarked on the connexion of ἴσος and ἴδιος, which are both analogous in meaning, as the latter is in form also, to μέσος (μέδιος). It is observable that ἴσος has a comparative ἰσαίτερος, and ἴδιος a comparative ἰδιαίτερος. The former might be explained by the existence of the word ἰσαῖος (the name of the orator), which bears the same relation to ἴσος that τριταῖος, &c. do to τρίτος, &c. But we are inclined to believe with *Buttmann (Ausführl. Sprachl.* § 65, 5, *Anm.* 6), that the particular form of the antepenultima (that is, according to our theory, the particular adverb to which the ending -τερος is attached) was often chosen by the speaker or writer arbitrarily and to suit his own ear. Thus we have from ἄσμενος, a perfect passive participle, ἄσμενώτερος, ἄσμεναίτατα, and ἄσμενέστατα.

167 When the Greeks formed the comparative in -ίων, they employed a superlative in -ιστος. Similarly, in Sanscrit a superlative in -isht'h'as corresponds to a comparative in -īyans or -īyas. It will be worth our while to examine these forms a little more minutely. Most of the Greek, and many of the Sanscrit adjectives which form

their comparatives and superlatives in this manner, end in *-us* or *-r^a-s*. Why the former should prefer this method it is difficult to say, but one may easily see why the latter, which already contain part of the ordinary comparative-ending, should repudiate the common termination. The fact, however, is, that it is only by a substitution of the ending *-us* that adjectives in *-ros* pass to the qualitative form in *-ίων*. That is to say, those Greek adjectives which already end in *-o-os*, and those Sanscrit adjectives which have this or any other consonant-suffix, drop it in the comparative, which is formed as if from an adjective in *-us*. Thus, *αἰσχ-ρός* makes *αἰσχ-ίων*, *ἐχθ-ρός*, *ἐχθ-ίων*, &c. In Sanscrit the vowel of the new positive is always affected by *guna*: thus, *kship-ra*, "swift," makes *kshêp-iyas*; *kshud-ra*, "little," *kshôd-iyas*; *dûra*, "far," *dav-iyas*; *yu-van*, "young," *yav-iyas*; *sthû-la*, "thick," *sthav-iyas*, &c. We think the long syllable in the penultima of these Greek and Sanscrit comparatives, is occasioned by the coalition of the final vowel *u*, from which they are always formed, with the *i* of the ending. In the words *θάσσων*, *γλύσσων*, &c. the final *u* has been elided, and the short *i* as usual changed into *y*, whence the assimilation. There are three instances of a somewhat similar kind in Sanscrit: *pri-ya*, "dear," *sthî-ra*, "firm," and *sphîra*, "swollen," form their comparatives by adding *-yas* to a *guna* of the roots, thus, *prê-yas*, *sthê-yas*, *sphê-yas*. The reason of this is obvious: for otherwise there would be a concurrence of *êiy* = *eiyy*, which would not be allowable.

In compliance with the custom of all writers on grammar we have talked of a superlative in *-ισ-τος* or *-ish'-th'as*. If it were true, as Grimm supposes (*Deutsch. Gramm.* III. p. 583), that the superlative is properly formed from the comparative, it would be necessary to infer that these two syllables constitute the ending of the superlative as such, and that, in the Sanscrit at least, the syllable *ish* was a contraction of *-iyas*; and this is Bopp's notion (*Krit. Gramm. der Sanskrita-Sprache*, p. 113). To us it appears quite unnecessary to derive the superlative from the comparative in any case. Nobody will assert that the more common comparative ending *-ta-ra*, *-τε-ρος*, is contained in the corresponding superlative; why then should we suppose that the other comparative is? The comparative expresses a relation between two things; one is farther than or beyond the other (*ta-ra*), or bears a certain qualitative ratio to it (*i-yân's*). The superlative expresses that the thing is the last in the series, proceeding from (*-ta*) the object nearest to (*-ma*) the subject, and so expressed by both elements (*-ta-ma*). These ideas are surely distinct, and need not be derived from one another. We believe that this superlative-ending *-ισ-τος* is simply the termination *-τος*, which we have already spoken

of, appended to an adverb in *-ις*. The adverb in *-ις*, by the side of which we frequently find an adverb in *-α* (cf. *μέγα, μόγισ, μάλα, μόλις*, &c.), seems to be an abbreviated inflexion of adjectives in *-υ-* or *-ευ-*. The *υ* is turned into *ι*, which probably always followed it in the complete termination *-vis* or *-hvis* before the *υ* was vocalized; thus the Sanscrit root *sviḍ* is represented both by *ῥῥδ-ωρ* and *ῥδ-ρώς*; *hve*, the root of *νίός*, appears in *φύ-ω* and *filius*, *ἔμοι* = *ἔμε-φί*, appears as *ἔμυ* in Boeotian Greek (Apollon. *de Pronom.* p. 364), *Οἰλέυς* = *Φιλέυς* appears as *Ἰλέυς* or *Οἰλέυς* (Hermann, *de Emend. Gr. Gr.* 415), &c. At any rate all comparisons in *-ων* and *-ιστος* seem to be ultimately referable to positives in *-υς*, *-εϋς*, or to adverbs in *-ις*. Although these forms in *-υς* or *-vis* do not exist, they may be presumed as possible from the analogies pointed out by Buttmann (*Ausführl. Sprl.* § 67, *Anm.* 6): namely, by the side of *μακ-ρός*, *αἰσχ-ρός*, and *νεκ-ρός*, we have the forms *μηκ-ύ-νω* (in which the root-syllable is guna'd as in the Sanscrit superlatives, and in *μήκιστος*, *μῆκος*), *αἰσχ-ύ-νη*, and *νέκυσ*. Similarly, *καλλίων*, *κάλλιστος*, though immediately connected with *καλός* = *καθ-λός*, most probably refer to a by-form *καλ-λύς*; cf. *καλ-λύ-νω* after the analogy of *πολύς*, *πολλός*, *πράϋς*, *πραῶς*, &c. We do not, however, agree with Buttmann in regarding the termination *-υς* and *-ος* as originally the same. On the contrary, the terminations in *-υς*, as will hereafter be shown, contain a distinct pronominal addition to the crude form of the word, while in the ending *-ος* the nominative suffix is immediately attached. It is no slight proof of the durability of these suffixes, that Sanscrit words in *-us* or *-u* are always represented in Greek by corresponding adjectives in *-υς* or substantives in *-υ*: thus for the Sanscrit *svādus*, *prīthus*, *urus*, *ācus*, *laghus*, *mṛīdus* and *madhu*, we have the Greek *ῥδύς*, *πλατύς*, *εὐρύς*, *ῥκύς*, *ἐ-λαχύς*, *βραδύς* and *μεθύ*. The Sanscrit *bahus* has two Greek representatives, *βαθύς* and *παχύς*, just as *ahis* stands between *ῥχίς* and *ῥφίς*, or *han* between *φαν* (*φόν-ος*, *ἐπέφν-ον*) and *θαν* (*θάν-ατος*, *θν-ήσκω*, Benary, *Berl. Jahrb.* August, 1834, p. 229). There are cases, in which the superlative termination is *-ος-τος* = *-ως-τος*, as in *πολλ-ος-τός*, for which we might have had *πόλιστατος*; as may be seen by a comparison of *ὀλιγοσ-τός* with *ὀλίγιστος*. For the form *πολύς* admits of an adverb in *-ις*, as *πολλός* does of an adverb in *-ως*, and perhaps, after all, the difficult word *τριπόλιστατος* in Soph. *Antig.* 857, may contain a remnant of this other superlative of *πολύς*. The name *Ὀδυσσεύς* = *Ὀλυσσεύς* or *Ὀλισσεύς* points to an original *ὀλιγεύς*, which would fully account for *ὀλίγιστος* (see Kenrick, *Herod.* p. 281, and *Varron.* p. 142). The terminations *-τερος*, *-τατος*, are sometimes appended to adverbs in *-ις* from by-forms in *-εϋς*, as in *λαλίσ-τερος*, *πιωχίσ-τερος*, *ῥρπαγίσ-τατος*, &c. We must not confuse this with the fact that adjectives, in *-ης* or *-ητις* and *-έντις*, and even

some in *-ων* (*-ον-ς*), *-ιξ* (*-ιχ-ς*), regularly form the comparative and superlative in *-έσ-τερος*, *-έσ-τατος*; for in these cases we have remains of the adverb in *-ως*. Nor does the apparent analogy of *magis* favour the derivation of *μέγισ-τος* from an imaginary comparative *μέγισ* for *μεγίων*; the comparative of *mag-nus* has suffered all sorts of abbreviations; in *major* the *gi* has become *j* as usual, while *magis* has lost the *u* of the ending: the *g* has become *z* in the Zend *mazista*, and has vanished altogether from the French *mais*. There is no reason whatever why there should not be a form *μεγε-ύς*, as well as *μέγε-θος*. On the contrary, the existence of *μέγισ-τος* is a reason for presuming the existence of *μεγεύς*, just as we might presume the existence of *ἄρευσ*, if we did not know it, from the superlative *ἄρισ-τος*, and as a positive *vasus* has been inferred from the Zend superlative *vahista* (Benary, *Berl. Jahrb.* August, 1843, p. 230). In fact, the adverb *μόγυς*, as we have already mentioned, is itself an argument in favour of the same supposition. We find *ἐκά-τερος* by the side of *ἐκασ-τος*, because, as we shall see, *ἐκα* is an adverb as well as *ἐκας*. So also some adjectives in *-υς* add the terminations *-τερος*, *-τατος* to their neuter used adverbially, as well as employing the other adverbial form in *-ις*. Cf. *γλυ-κύτατος* with *γλύκ-ις-τος*.

CHAPTER III. THE PREPOSITION.

168 Independent value of prepositions as positional words. 169 General view of the Greek prepositions according to the elements of which they are composed. 170 *Eis*=*ἐν*-s and *ἐν*. Apparent use of *ὡς* as a preposition. 171 *Πρό*, *πρός*-s, *προ*-τί, *ἀν*-τί, *ἔν*-τα. Expression of space and time respectively by the same prepositions. 172 *Ἐπί* and *ἀμφί* identified with *abhi* and *ob*. 173 Their agreements in meaning with each other. 174 The use of *ἐπί* in composition to signify mutuality or interchange, also points to its affinity with *ἀμφί*. 175 The same appears also from its use with the dative to signify combination or coexistence. 176 Etymology of *ἐξ*. Use of *ἐκθνήσκω* and *ἐκφέρω*. 177 *Ἀπό* and *παρά*. Connexion of the latter with *περί*, *πρός*, *præ*, *præter*, and *per*. 178 *Περί* and the Sanscrit *pari*, *para*. 179 *ὑπό* and *ὑπέρ*. 180 *Διά* and *δυσ*-. 181 *Σύν* and *μετά*. 182 *Κατά*, another form of *ἄντα*. 183 *Ἀνά* and *κατά* are properly correlatives, and are most satisfactorily examined together. 183 *Ἀνα*, *ἐν*-, *ἐν*-, and *ἀπο*- as negative prefixes; *κατά* as an affirmative. 185 The intensive *ἄλφα*. 186 *Ἄν* and *κέν* related to *ἀνά* and *κατά*. 187 Position of *ἔν* and *κέν* in the sentence.

168 **P**REPOSITIONS are pronouns or positional words in the strictest sense of the term*. They express relations of place, and in their ordinary use are employed to denote the relative positions of visible objects. Grammarians tell us that they *govern* cases, and it is the prevailing practice to arrange them according to the cases which they are said to govern. But this is palpably erroneous: for in all languages which have inflected nouns, a case may express by itself any relation which the addition of a preposition could give to it and,

* The preposition is fully discussed in the new edition of Pott's *Etymological Researches*, the first part of which has just appeared (*Etymologische Forschungen auf dem Gebiete der Indo-Germanischen Sprachen; Zweite Auflage in völlig neuer Umarbeitung; erster Theil: Präpositionen.* Lemgo und Detmold, 1859). The whole of the volume (859 pages) is devoted to this subject. As usual, Pott exhibits an inexhaustible abundance of lexicographical details and illustrations, but he seems to be still unacquainted with the analysis of these pronominal forms, which was first expounded, twenty years ago, in the present work, and without which, as we conceive, no definite results can be obtained. In general we think he has rendered himself liable to the happy remark, which he made upon Benfey (*Jahrb. d. Wiss. Krit.* 1840, p. 629), that "it always excites a feeling of dissatisfaction, when the head of the nail is missed, though we see the hammer falling with busy haste on all sides of it."

in languages which, like the Sanscrit and the modern Russian, have a complete assortment of cases, many relations of place are invariably expressed by the cases without any particle prefixed. Such would have been the fact in the Greek language too, but the rules of euphony, convenience, the influence of writing, and a multitude of other causes, have contributed to mutilate the terminations of the nouns as well as of the verbs, and thus prepositions, the force of which was originally included in the case-endings, have come to be prefixed for the sake of greater distinctness, just as the particular noun is placed after the pronoun, called the article, in repetitions, and just as the nominative case is prefixed to the verb.

169 There are eighteen Greek words which are commonly reckoned as prepositions: six monosyllables, *εἰς*, *ἐν*, *ἐξ*, *πρός*, *πρός*, *σύν*, and twelve dissyllables, *ἀμφί*, *ἀνά*, *ἀντί*, *ἀπό*, *διά*, *ἐπί*, *κατά*, *μετά*, *παρά*, *περί*, *ὑπέρ*, *ὑπό*. We shall consider these according to the relations which they express, and not according to any arbitrary division of former grammarians*. Since the prepositions retain their original meaning, as words indicating positions and directions in space, more characteristically than any other pronominal words, and also present the simplest combinations of the original elements of the pronouns, we will, previously to examining these Greek forms separately and in detail, endeavour to point out their etymological analysis in a summary manner, and to explain the general principles of their composition.

It has been stated before that the primitive pronouns are three in number, expressing respectively the positions *here*, *near to the here*, and *there*, and that different modifications of direction or position may be denoted by combining these original stems with one another or with the particle *la* or *ra*. On examination it will appear that all the Greek prepositions, with the exception of *διά* which is a form of the second numeral, are compounds of at least two of the primary elements, or of one of

* The object of this chapter is to discuss the origin and signification rather than the syntax of the Greek prepositions: as a supplement to the cases they are fully treated in the *Greek Grammar*, articles 470—488.

them with *-ra*. We have already adverted to the principles according to which we would arrange and classify all pronominal compounds (§ 130). After a careful dissection of all the pronominal forms with which we are acquainted, we have arrived at the conclusion, that if any one of the elements of position is combined with *-ra*, it indicates motion and continuation in a direction of which the element in question represents the point nearest to the subject; and that, by subjoining any one of the pronominal elements to any other of them, we denote a motion or continuation from the position denoted by the first element towards that indicated by the second. Thus we have seen, that the second element when prefixed to *-ra* (as in *tva-ra*) expresses motion onwards from the position indicated as *near*, so as, in fact, to coincide with a word indicating the third position (*ta*); and that the first element subjoined to the third (as in *ta-ma*) expresses motion or continuation from the third position towards the first, so as to coincide with the second position (cf. *fini-timus*, &c.). We shall find this method most amply illustrated by the Greek prepositions. Of these, $\pi\alpha\text{-}\rho\acute{\alpha}$, $\pi\epsilon\text{-}\rho\acute{\iota}$, $\pi\text{-}\rho\acute{o}$, $\pi\text{-}\rho\acute{o}\text{-}\varsigma$, are compounded of the first element and $\text{-}\rho\alpha$. In the first, which is also written $\pi\alpha\text{-}\rho\alpha\acute{\iota}$, we find both elements in the simplest form. In the second, in which traces of a heavier ending still remain, the vowel of the first element has assumed the lighter form ϵ , according to a principle which will be more fully explained hereafter. In $\pi\text{-}\rho\acute{o}$ and $\pi\text{-}\rho\acute{o}\text{-}\varsigma$, which are in fact one and the same word, another element has been subjoined in the s , indicating motion or transitiveness, and probably a shortened form of the affix $\text{-}\omicron\varsigma$, $\text{-}\sigma\iota\omicron$, which plays an important part as the sign of the genitive case. In consequence of this addition, the root-vowel has been dropt before the liquid, and a medium weight given to the vowel of the termination. The forms $\pi\text{-}\rho\omicron\text{-}\tau\acute{\iota}$, $\pi\omicron\text{-}\tau\acute{\iota}$, also used for $\pi\text{-}\rho\acute{o}\text{-}\varsigma$, are compounds, one of the preposition $\pi\text{-}\rho\acute{o}$, the other of the simple element of the first pronoun, with the element of the second under the form $\tau\iota = \varsigma$ (§ 152); and both, therefore, denote (the former more strongly) motion from the first to the second position. A similar form is $\mu\epsilon\text{-}\tau\acute{\alpha}$, which is compounded of the first and third elements, and signifies “with” as a connexion between the *here* and the *there*, and “after” as denoting an approximation to their union.

The third pronoun is twice subjoined to the second in $\kappa\alpha-\tau\acute{\alpha}=\kappa\epsilon\nu-\tau\acute{\alpha}$, as it is to the first in $\mu\epsilon-\tau\acute{\alpha}$, and the meaning which results is analogous. In the Sanscrit *sa-ma*, the first element is appended to a form of the second; the meaning "with," which results, is explicable in much the same way as the similar sense of $\mu\epsilon-\tau\acute{\alpha}$. If the latter expresses "with" as implying a junction of the *here* with the *there*, so *sa-ma* may convey the same sort of idea as implying an union of the *near* with the *here*. We shall see by and by how this differs from $\sigma\acute{\upsilon}\nu=F\alpha-\nu$. The prepositions $\acute{\iota}\pi\acute{o}$, $\acute{\iota}\pi\acute{\epsilon}-\rho$, are related as *ta* is to *ta-ra*; the latter expresses a continuance of the direction implied by the former. It must be observed, however, that the final vowel of $\acute{\iota}\pi\acute{o}$, like that of $\acute{\alpha}\pi\acute{o}$, $\pi\rho\acute{o}$, indicates the loss of the genitive *s*, so that the full form was $\acute{\upsilon}\psi$, or $\acute{\iota}\pi\acute{o}\varsigma=\acute{\iota}\pi\acute{o}\theta\epsilon\nu$. The first syllable of $\acute{\iota}\pi\acute{o}$ is a vocalization of the second pronoun *Fa* or *sva*. In Sanscrit it appears as *u* in *u-pa*, and in Latin as *su* in *su-b*. Of the successive mutilations of this stem from *sva* to *hi*, *i*, we have already spoken, and we have also hinted the general tendency of the aspirated labial to vocalize itself into *i* as well as *u*. We shall, therefore, have little difficulty in recognising it in the Greek $\acute{\iota}$, the Latin *su*, or even in the Sanscrit *u*. According to this analysis $\acute{\iota}\pi\acute{o}$ should signify a direction from the immediately *near* to the *here*, and $\acute{\iota}\pi\acute{\epsilon}-\rho$ a continuation of motion in that direction; we shall see presently that this agrees very well with the common use of these prepositions as the correlatives "under" and "over." The element *a* (*e*), must be the ultimate form either of *ha* from *Fa*, or of *na*. There are many cases in which this element appears in combination with an existing *na*, and we must suppose, in those cases, that it is the pronoun *Fa* prefixed to *na*, especially as there are occasionally traces of a lost digamma. Now there are three Greek prepositions in which we have the compound of *a* or *e* and *na*:— $\acute{\alpha}\nu\acute{\alpha}$, $\epsilon\iota\varsigma=\acute{\epsilon}\nu\varsigma$, and $\acute{\epsilon}\nu$. The idea of farness is strongly conveyed by the first; the last and shortest form conveys simply and explicitly the idea of locality; and in the second this is combined with the idea of motion. The element *a* (*e*) appears in three other prepositions, $\acute{\alpha}\pi\acute{o}$, $\acute{\epsilon}\pi\acute{\iota}$, and $\acute{\epsilon}\xi=\acute{\epsilon}\kappa\varsigma$. In these compounds there is reason to believe that the $\acute{\alpha}$ or $\acute{\epsilon}$ is the residuum of the element *na*. For otherwise we must have an unmeaning reduplication of the idea of

nearness in the preposition ἐξ, and ἀ-πό would, on that supposition, be identical with ὕ-πό = φ-α-πό. The lighter vowel is chosen in the two latter because their terminations are heavier. The two former are indicative of a direction from the distant to the *here*: the latter of motion from the distant to that which is near. The first and third have the cognate meanings "from" and "out of:" that which comes from the distant hitherward comes "from," or, if through an intermediate spot, "out of" it. The signification of ἐπὶ is "upon" or "across;" the vowel of its termination, as well as that of περὶ, points to an original expression of locality by way of case-ending. A comparison of ἀπό, ἄψ (ἀ-πός), π-ρό, π-ρό-ς, convinces us that both ἀ-πό and π-ρό originally possessed the final *s*, which we have mentioned before as the index of transitivity. Ἀν-τί and ἀμ-φί are compounds, of which the first part is ἀ-νά. The latter part of ἀν-τί is the same as the termination of προ-τί = πρό-ς, and is therefore equivalent to the sign of the genitive case. As we have παρά by the side of περὶ, so we have ἄντα as well as ἀντί, and these again are represented by εἴ-τα and εἴ-τι (below, § 193). The termination of ἀμ-φί is a mutilation of the second pronominal stem, which is often used to form the locative or dative case. In Æolic and Doric ἀμ-φί is written ἀμ-πί, but we regard this as merely a dialectical corruption. It is clear from ἄμ-φω = ἀνὰ δύνω, that φι for σφι is the more genuine form. A similar but more general corruption has taken place in ἐ-πί, the last syllable of which does not appear to be a case-variation of the ending of ἀ-πό, but a substitute for φι, since in its proper meaning ἐ-πί is strictly locative. If therefore the first syllable ἐ is a residuum of ἀν-, we may trace ἀμ-φί and ἐπί to a common origin, and we shall see that their use is not so very different.

170 We commence our separate examination of the Greek prepositions with εἰς and ἐν, which we believe to have been originally identical, and which express the simplest and most elementary notion of locality—the being *in* a place. In the Sanscrit system of cases there is one which by itself expresses this relation, and therefore it is not to be wondered at that there should be no Sanscrit preposition corresponding to ἐν. Now in the Sanscrit pronouns the termination of this locative case is *i-n*: thus, *tasmin*, "in this," *kasmin*, "in

what?" *étasmin*, "in the same," *yasmin*, "in what," *sarvasmin*, "in every thing." The pronouns of the first and second person are exceptions: these form their locatives in *i*, like the bulk of the Sanscrit nouns*. Bopp supposes (*Vergl. Gramm.* p. 231) that the termination in *-in* is of later origin than that in *-i*, and that the final *n* is merely a *ν ἐφελκυστικόν*, or an arbitrary addition. We do not believe that *ν ἐφελκυστικόν* in Greek words is a merely capricious termination: there is no reason why an *n* should be added; and it is very easy to see, on the contrary, how time might have caused an abbreviation of the ending, which is so liable to become evanescent (§ 114). Besides, the use of the full termination in old words, like the pronouns, in Sanscrit, and its appearance in the Greek and Latin pronouns are to us sufficient proofs of its being the most ancient form of the locative. The Greek pronouns in which this termination is found, are *ἐμίν*, *τεῖν*, *τίν*, *ἔν*, *ἐίν*, *σφίν*, *φίν*, *ψίν*, *ἡμῖν*, *ὕμῖν*, *πρίν*, &c. In Latin it is even more extensively used, though in accordance with the genius of the language it is generally changed into *i-m*, except in compounds. *Olim* is obviously the locative of *ille* or *olle*, and means "in that time." The same appears with regard to the other adverbs of time, *quom* and *interim*. *Nam* is the locative of some lost pronoun analogous to *tam* and *jam*, and means "in that" = "for," just as *sin* means "in this" = "if," the one pointing to something that has been mentioned, the other to something about to be mentioned. *Enim*, which is related to *nam*, just as *tango* is to *contingo* (Bopp, *Vergl. Gramm.* p. 534), is a compound word like the Sanscrit *a-na*, *ê-na*, *ê-ta*, *ê-ka*: compare the Greek *νῦν*, *νῦν*, *νόσφι*, with *κεῖ-νος*, *τῇ-νος*, *ἀ-νό*. The same termination with the same meaning is found in *istim*, *instinct(e)*, *illim*, *illin-c(e)*, *hin-c(e)*, *intrin-secus*, *extrin-secus*, *quin*, *in-de*, *utrin-de*, *un-de*, *subin-de*, *dein*, &c. The first part of *perendie*, which, as we showed before, is formed like the Sanscrit *parêdyus*, or *aparêdyus*, from a pronominal adjective signifying "other" or "further," and the common word "a day," exhibits the locative of the adjective very clearly, as does also the Sanscrit equivalent *aparê* = *apara-i*. It is obvious that this termination *-in* or *-en* is identical with the Latin preposition *i-n*, which from the disuse of the locative case is always employed to express the simple notion of locality. The difference of vocalization need not prevent us from identifying *ἐν* with *in*. The Latin *in* may express the meaning of all the Greek compounds of *ἀ-* or *ἐ-* with *να*, and even the negative prefix *ἀνα*, which is a formation of the same kind: *e.g.* *ἀνὰ μέρος* = *in-vicem*; *εἰς τὴν πόλιν* = *in urbem*;

* Those Sanscrit nouns which form their locative in *ê* are no variation from the general ending in *i*, for in all those nouns the crude form ends in *a*, and *ê* = *ai*.

ἐν τῇ πόλει = *in urbe*; ἀνήριθμος = *in-numerus*. We must therefore be contented to suppose that the first part of ἐν = *i-n* is the ultimate weakened form of the second personal pronoun, the stronger form of which appears in the Greek locative ἔ-να, "where," and both stronger and weaker in the forms analyzed in the last chapter but one. There are traces of this locative of the second pronoun in the prepositions εἰν, εἰνί; and in this pronominal sense ἐν itself is often used in the best writers. Thus, Sophocl. *Æd. Tyr.* 27: ἐν δ' ὁ πυρφόρος θεὸς σκήψας ἐλαύνει. And thus we see why the first and second personal pronouns, when it was necessary to give to them that more marked and definite expression of locality which is conducive to their distinctness as numerals, were occasionally combined with this form of the third demonstrative pronoun.

That εἰς and ἐν are essentially the same word has not escaped the notice of Greek scholars. In Pindar we have ἐν with an accusative case expressing motion to a place, where we should certainly find εἰς in Attic (*Pyth.* II. 11 and 86; V. 38; *Nem.* VII. 31), and there are passages in which εἰς with an accusative is found instead of ἐν with a dative (Porson *ad Eurip. Phœniss.* 1381). It might be suggested that εἰς = ἐνς was the basis both of ἔς and ἐν, the former omitting the ν, the latter the σ. But it is not necessary to regard them in this light. We consider them to be related simply as μείς, μέν, δείς and δέν; namely, μέν, δέν, and ἐν are three locatives, and μείς, δείς and εἰς are three transitive forms incorporating the idea of locality. That εἰς expresses motion to a place (not unlike δε), while ἐν expresses nothing but locality, or the abiding in a place, is to be explained from the addition of the element σ, which is also a mark of the nominative or relation of subjectivity. The termination *n(ā)s* appears also in the Latin preposition *trans*.

There is only one passage, so far as we know, in which the preposition εἰς has occasioned any difficulty. It is in Euripides, *Bacchæ*, 742:

ταῦροι δ' ὑβρίζται κείς κέρας θυμούμενοι
το πρόσθεν—

from which Virgil has taken his *irasci in cornua* (*Georg.* III. 232; *Æneid.* XII. 104), and which is also imitated by Ælian (*Hist. Anim.* II. 20 and IV. 28, where we have ὑβρίζειν εἰς κέρας). We think the line in Euripides explicable from the idea of "looking towards," implied in the classical use of εἰς, and from the passage in his *Helena* (1558), where a bull is described as κυρτῶν τε νῶτα κείς κέρας παρεμβλέπων.

With regard to the so-called usage of ὥς as a synonym for εἰς, it need only be observed that this adverb is constantly employed by the

best writers with prepositions of motion like *εἰς*, *ἐπὶ*, *πρὸς*, especially the latter, followed by an accusative, so that the three words are equivalent to *ὥς* with a participle, and the construction is explained in the common grammars by a supposed ellipse of the participle. This, of course, is an unnecessary hypothesis; but it is generally easy to see that there is an ellipsis of the preposition *πρὸς* in the apparent use of *ὥς* for *εἰς* with the accusative, which is generally restricted to the names of persons. Thus we read (Demosth. *Phil.* iii. p. 113): *εἰς Φωκίας ὥς πρὸς συμμαχόντος ἐπορεύετο*, where *εἰς Φωκίας* strictly speaking denotes the name of the country, whereas *ὥς πρὸς συμμαχόντος* is a personal reference: from which mode of speaking arose the use of *ὥς* alone with the names of *persons*, in nearly the same sense as *εἰς* with the names of *things*; e. g. *πρέσβεις πέπομφεν ὥς βασιλέα* for *ὥς πρὸς βασιλέα* (Demosth. *Phil.* i. p. 54).

171 The most elementary notion of situation next to that of mere locality is the notion of that which is *before* us, in which the notion of forwardness, or motion forwards, is included. The simplest word for expressing this in Greek is *πρό*, which is a compound of the first pronominal stem under the form *pā* with the termination *ra*, signifying, as we have seen, motion, and conveying the idea of beyond. This word, like *εἰς* and *ἐν*, appears among the numerals; for a superlative form of it (*πρῶτος*) is used as the ordinal of the first number. Another form of *πρό* is *προτί* (Sanskrit *prati*) or *πο-τί*, where *τι* has taken the place of the genitive *-ς*. That *π-ρό-ς* is only the fuller and more genuine form of *π-ρό* appears as well from the comparison of *ἀ-πό*, *ἀψ*, suggested above, as from the fact that *π-ρός*, under the still more complete form *πάρος*, is used as a synonym for *πρό*. The idea of motion, conveyed by *π-ρός* or *π-ροτ-ί*, has been before explained; the form *πρός* combines with a word expressing *here*, the syllable *ra* indicating motion, and the termination *s*, which has much the same force (compare *εἰς*): *προ-τί* contains the same affix in a fuller form, and *ἀν-τί*, which is all but a synonym of *πρό*, also terminates in this genitive *τι* = *θεν* = *ς*. As *ῥα* ultimately = *να*, and as *ἀ-νά* = *φα-νά*, the only difference between *π-ρο-τί* and *ἀ-ν-τί* is that which is indicated by the first syllable; namely, the starting-point in *π-ρο-τί* is the *here*, in *ἀ-ντ-ί*, the *near*. In the Latin *ante* we have *ē* for *ī*, as in *mare, leve*, &c. And here we must notice the fact, that, whereas the notion of priority in time is expressed in Greek by *πρό* or *πάρος* and not by *ἀντί*, the same meaning is conveyed in Latin by *ante* and not by *pro*. This interchange in meaning belongs to a class of phenomena not uncommon in cognate languages, and is by no means inconsistent with the etymological identity of *πρό*, *pro*, and *ἀντί*, *ante*. In the sense in which *ἀντί*

most nearly corresponds to *πρό*, i. e. "in front of," we have more usually the form *ἔντα*, though elisions often prevent us from saying which vowel is represented under the apostrophe (see *Greek Grammar*, 474, (aa)). We shall see below *κατά* = *κεν-τά*, which is really a form of *ἔντα*, has a temporal meaning, which is not in accordance with the temporal values of *πρό* or *ante*, though their local meanings ultimately coincide.

In general there is some difficulty in reconciling the local with the temporal values of the prepositions. That the conception of time is a refinement or modification of that of space has been mentioned in a former chapter (§ 54). And it is clear that position in space is used for the measurement of time. The dial-plate of a clock with its moving hands is a sufficient indication of this. And the words *καιρός* (from *κείρω*) and *tempus* (from *temno*) show that the measurement of time is derived from that of distance or magnitude. The word *καιρός* in particular is a synonym of *μέτρον*. Thus Plato (*Politicus*, p. 284 E), when he divides the *metretic* art into two portions, defines the second as containing those arts *ὅποσαι πρὸς τὸ μέτριον καὶ τὸ πρέπον καὶ τὸν καιρὸν καὶ τὸ δέον καὶ πάνθ' ὅποσα εἰς τὸ μέτρον ἀπρωκίσθη τῶν ἐσχάτων*. Hesiod says, *Op. et D.* 692: *μέτρα φυλάσσεσθαι, καιρὸς δ' ἐπὶ πᾶσιν ἄριστος*. Pindar also combines the two words, *Pyth.* iv. 286: *ὁ καιρὸς πρὸς ἀνθρώπων βραχὺν μέτρον ἔχει*. It seems to refer especially to the distance in aiming at a mark. Thus in Æschylus, *Agam.* 363 we have *πρὸ καιροῦ*, "short of the mark;" and in Pindar, *Nem.* viii. 4, *καιροῦ μὴ πλαναθέντα* seems to be equivalent to *σκοποῦ μὴ πλαναθέντα* (vide *ad Pind. Ol.* ix. 38; *Varronianus*, p. 392). In *Pind. Fragm.* 150, *καιρός* is actually opposed to *χρόνος*, for we must construe the words *διακρίναι ἐν καιρῷ* together; "there was plenty of time for a person looking on to discern the whole proceeding accurately" (*ἦν δὲ ἰδόντα διακρίναι πολλὸς ἐν καιρῷ χρόνος*). But although time is generally expressed in language denoting primarily the relations of space, the analogy is not always maintained. Future time is generally regarded as before us, and as approximating. Hence, as we shall see (below, §§ 370, 371), it is expressed in the tenses of the verb, by the pronominal element denoting nearness in space, whereas past time is indicated by the augment, which is the fragment of a preposition denoting distance. When, however, we express these ideas by prepositions and their cases, we find a good deal of confusion. For while future time is expressed by *μετά* with the accusative, which really means motion with a view to conjunction, as *βῆ μετ' Ἰδομενεῖα*, "he went after (to overtake) Idomeneus," compared with *ἐγένετο μετὰ ταῦτα*, "it came to pass after these things," past time is expressed by *πρό* and in Latin by *ante*, both of which indicate an object as immediately before us.

Again, although *κατά* and *μετά* both express motion in the track of some one proceeding (as in *κατὰ πόδας*, "at the heels," *μετ' αὐτόν*, "after him"), we find that *καθ' ἡμέραν* means "day by day," and *μεθ' ἡμέραν*, "in the day-time." And while *ἐπί* with the dative signifies "after," as *ἐπὶ χιόνι πεσούσῃ*, "after snow has fallen," *ἐπί* with the genitive denotes priority in time, as *ἐπὶ Δαρείου*, "in the time of Darius," i. e. at a former period. As *ἐπί* has this meaning because past time denotes a reckoning upwards (below, § 173), we find that *ὑπὲρ τὴν φθοράν* means "before, earlier than the destruction" (Plat. *Tim.* 23 c); and this may be in part the meaning of *ἀνὰ* in the augment. On the whole, then, we see that the ideas of "before" and "after" in space and time are qualified by the special reference in the particular case, and that while *πρὸ ἐμοῦ* in space means "before me," i. e. in front of me, *πρὸ ἐμοῦ* in time means "before me," i. e. in the progress of events, in the torch-race of life, which is "behind me" in regard to the appointed post of the successive runners.

172 We have already suggested that *ἐπί* and *ἄμφι* = *ἀνὰ* are by-forms of one and the same preposition. If so, the primary meaning of both must be superposition combined with an idea of juxtaposition, and this resolves itself into the ideas of upon and around. Before we examine this meaning we will point out the connexion between these particles and their Sanscrit and Latin synonyms *abhi* and *ob*. Wilson's account of *abhi* is as follows: "*Abhi* is a preposition and particle implying (1) superiority in place, rank or power (over, upon, against, above), (2) proximity (near), (3) separation (severally), (4) wish, desire, (5) conjunction, particularizing (to, with respect to). Thus *abhi-kramituṇ*, to overpower; *abhi-gantuṇ*, to approach, *abhi-khyātuṇ*, to speak to; *abhi-bhava*, disgrace; *abhi-lâsha*, desire; *abhyagnin*, on the fire." From this *abhi* we have the adverb *abhitas*, "near." The conjunction and inseparable preposition *api*, which is a still nearer approach to the Greek *ἐπί*, occurs as a preposition before a few roots, and seems to signify "over;" the roots *dhâ*, "to place," *nah*, "to fasten," receive the meaning "to cover;" when this particle is prefixed. The *a* of *api* is usually omitted; e. g. *pinad-dha*, "covered," "clothed." As a conjunction, we very often find *api* by itself, without any rejection of the *a*, in which case it signifies "even," "though," "yet," "assuredly," "moreover," "therefore," "also;" it is likewise an interrogative particle; the compound *kim-api* is equivalent to *quispiam*, or, if preceded by the relative, to *quicunque* (Wilson *sub v.*; Bopp, *Kritische Grammatik der Sanskrita-Sprache*, p. 55; and *Glossar. Sanscr.* p. 73). So that *api* and *abhi* seem to be modifications of the same word. This view of the con-

nexion of *ἐπί*, *abhi*, and *api*, is supported by the common usage of *ἐπί*, which always conveys the idea of nearness or approximation, even when it is followed by an accusative and signifies motion. Now we may fairly conclude that the nasal has fallen out in *abhi* for *ambhi* = *ἀμφί*, just as in *abhra* = *ὀμβρος*, in *ubhau* = *ἄμφω*, *ambo*, &c. The identity therefore of *ἐπί* and *abhi* farther confirms the connexion between *ἐπί* and *ἀμφί*. On the other side *ἐπί* coincides so remarkably in some of its applications with the Latin *ob*, that it is difficult to suppose that the Greek and Latin prepositions can have had different origins. Thus *optimus* from *ob* manifestly denotes uppermost, and therefore stands like *supremus* and *summus* in complementary opposition to *infimus* and *imus*. Here we have *ob* with the common meaning of *ἐπί*, "upon." But it corresponds to the other meanings of *ἐπί* and *ἀμφί*, as Festus tells us (p. 178 Müller): "*ob* præpositio alias ponitur pro *circum*, ut cum dicimus *urbem obsideri*, *ob-vallari*, *ob-signari*...alias pro *ad* ponitur, ut Ennius: *ob Romam noctu legiones ducere cœpit*, et alibi *ob Trojam duxit*." So also in the fragment of his *Telamon* quoted by Cicero (*Tusc. Disp.* III. 18): *Hicine est ille Telamo, modo quem gloria ad cœlum extulit, quem adspectabant, cuius ob os Graii ora obvertebant sua*. (Compare the *ἐπι-στρεπτὸς αἰὼν* of Æschyl. *Choëph.* 350.) The same may be said of the use of *obeo*, "to go to," "to visit." The English preposition "upon" conveys much the same idea as *ἐπί* in such passages as Hom. *Od.* v. 17: *οἳ κέν μιν πέμπουσιν ἐπ' εὐρέα νῶτα θαλάσσης*. Now it is pretty clear that *ob* is a shortened form of *amb*. Thus *obba* stands of the side of *ἀμβίξ*, and Festus has told us that there are many usages of *ob* in composition in which it corresponds in meaning to *ἀμφί* or *περί*, even more than to *ἐπί*: compare *obsidere urbem* with the Greek *ἐφ' ἑξέσθαι* on the one hand, and *περικαθῆσθαι κύκλῳ τὸ τεῖχος* on the other: if *ob-scurus* reminds us of *ἐπίσκοπος* and *ob-edio* of *ἐπακούω*, *ob-esus* (*bassus*) suggests *ἀμφιλαφής*, and *ob-erro* may be translated by *περιπλανῶμαι*; and if *occupo* corresponds to *ἐπιλαμβάνω*, so does *ob-liquus* to *ἀμφίλογος*.

173 But we must now show that *ἐπί* and *ἀμφί* agree occasionally in meaning with one another. The most striking instance of this is furnished by the syntactical usage of *ἐπί* with the genitive and dative as corresponding to that of *ἀμφί* or *περί* with the accusative and dative. With the genitive case, *ἐπί* denotes, as we have elsewhere shown*, *superposition with separation*. The latter part of the meaning belongs more immediately to the case itself, but of course the preposition must be able to reconcile itself to such an application. Now

* *Gr. Gr.* Art. 483.

there are two modes of connecting the idea of superposition with that of separation. The first is when we imply that the separation is total, but that a line drawn over one object will pass over the other. Here then we denote direction or motion at a certain height or distance: *e. g.* a ship at sea was spoken of as up in the air (*μετέωρος*); hence such phrases as *πλεῖν ἐπὶ Σάμου* (Thucyd. i. 116); and post or distant time supposes a reckoning upwards, as we shall show farther when we come to the temporal augment; hence we have such phrases as *ἐπὶ Δαρείου ἐγένετο* (Herod. vi. 98). It is clear that we might say, with a slight difference of meaning, *πλεῖν ἄμφι Σάμον*, and *ἄμφι τὸν Δαρείου χρόνον*. The other mode of considering superposition and separation together is where we signify that the whole of a superimposed object does not rest on the supporting surface. Thus we imply only a *partial superposition* when we say that planks are laid across piles fixed at intervals (Herod. v. 16: *ἵκρια ἐπὶ τῶν σταυρῶν ἔσθηκε*), or that burdens are placed on the head or shoulders, so as to extend beyond them on both sides (Herod. ii. 35: *οἱ μὲν ἐπὶ τῶν κεφαλῶν φορέουσι, αἱ δὲ γυναικες ἐπὶ τῶν ὤμων*). Hence such phrases as *ἐπὶ θρόνου καθίζεσθαι*, *ἐφ' ἵππου ὀχεῖσθαι*, because in sitting and riding the legs hang down by the side, and the Spartan woman gave her son his shield with the words: *ἦ τὰν ἦ ἐπὶ τᾶς* (Plutarch, *Lac. Apophth.* p. 241 E). Much in the same way, we find *ἄμφι* used with the accusative, as in Eurip. *Phæn.* 122: *ἄσπιδ' ἄμφι βραχίονα κονοφίζων*. With the dative *ἐπὶ* and *ἄμφι* give many traces of a cognate meaning; thus we can say with the same signification of proximity *οἰκέοντες ἐπὶ Στρομόνι* (Herod. vii. 75), or *ἄμφι δίναις Εὐρίπου* (*Iph.* T. 6). As however *ἄμφι* has retained its original form more completely than *ἐπί*, we must expect that the combined meanings “up and about, or around,” will be more consistently retained by the stronger word.

174 There is a very remarkable reference to the original meaning of *ἐπί* and *ἄμφι*, when the former is used in composition to signify mutuality, an interchange, a running of one thing into another. As this meaning of *ἐπί* has not been sufficiently noticed by Greek scholars, we shall illustrate it by examples. In this sense *ἐπί* is frequently prefixed to *ἄλλος*, or some word like it, and the origin of the meaning seems to be the same as that of *ἀλλήλων*, with which indeed it is combined, if we may adopt Hermann's very probable emendation of Sophocles (*Antig.* 57):

τρίτον δ' ἀδέλφω δύο μίαν καθ' ἡμέραν
αὐτοκτονοῦντε, τῷ παλαιπώρῳ, μόρον
κοινὸν κατεργάσαντ' ἐπαλλήλοιν χεροῖν.

The expression of mutuality or interchange by juxtaposition seems to

have been the result of a natural love of brachylogy or the shortest mode of expressing our meaning. When we say "they hurt one another," we mean that *A* hurt *B*, and also that *B* hurt *A*: which would certainly not be expressed by saying "the one hurt the other." Similarly in Greek, if we wrote ἄλλοι ἔκτειναν ἄλλους, we should merely express that the one party killed the other, but if we put the two pronouns together and write ἄλλοι ἄλλους (ἀλλήλους) ἔκτειναν, we express that the slaughter was mutual, that there were killers on both sides. It is therefore by an obvious contrivance for the purpose of saving a superabundance of words, that, whenever reciprocity is intended to be expressed, the subject and object are placed in immediate contact, in order that the hearer or reader may combine them both into one idea of agency. The fusion which has taken place in ἀλλήλων is only a further extension of the juxtaposition. In Plato, *Resp.* iv. p. 444, we have ἐπ' ἀλλήλων twice by the side of ἄλλο ἐπ' ἄλλον. It is precisely the same case with phrases like πρὸ δ τοῦ ἐνόησεν and πρὸς ἀλλότ' ἄλλον. This expression of reciprocity, by creating an idea of contiguity or contact, is sometimes extended in Greek to an expression of identity. This appears from the use of ἑαυτούς, αὐτούς, for ἀλλήλους (see Hesychius and his commentators *sub v.* ἑαυτούς). In the passage of Sophocles quoted above, we have αὐτοκτονοῦντε for ἀλληλοκτονοῦντε, and farther on in the same play (145), we find καθ' αὐτοῖν δικρατεῖς λόγχας στήσαντε for κατ' ἀλλήλων. In Plato (*Parmenides*, p. 133 E) we see the grounds of this usage more clearly: ἀλλ' οὐ τὰ ἐν ἡμῖν πρὸς ἐκεῖνα τὴν δύναμιν ἔχει οὐδὲ ἐκεῖνα πρὸς ἡμᾶς, ἀλλ', ὃ λέγω, αὐτὰ αὐτῶν καὶ πρὸς αὐτὰ ἐκεῖνά τέ ἐστι, καὶ τὰ παρ' ἡμῖν ὥσαυτως πρὸς ἑαυτά,—that is, ἀλλήλων καὶ πρὸς ἄλληλα. We do not very well understand what the author of the *συναγωγὴ λέξεων χρησίμων* (*Bekkeri Anecd.* p. 378) means by asserting that the converse is the case: ἀλλήλων ἀντὶ τοῦ ἑαυτῶν. οὕτως Εὐριπίδης καὶ Θουκυλίδης· καὶ πού τινες ἀλλήλων ἐρεῦσαντο, ἀντὶ τοῦ ἑαυτῶν. The passage of Thucydides here alluded to is as follows (ii. 70): ὅ τε σῆτος ἐπελελοίπει, καὶ ἄλλα τε πολλὰ ἐπερεγένητο αὐτόθι ἤδη βρώσεως περὶ ἀναγκαίας, καὶ τινες καὶ ἀλλήλων ἐρέγευντο. It is here simply stated that the Potidæans were reduced to the necessity of feeding on human flesh: of course ἀλλήλων is not used in its ordinary signification, for there could certainly be no reciprocity in such an action as that referred to in the text; but still less can any reflexive meaning be intended. Thucydides perhaps considers the Potidæans as one body, and intends, by the use of ἀλλήλων, to indicate that they fed upon the corpses of their fellow-citizens: this is the only way in which we can comprehend the interpretation given in the *συναγωγὴ*. There are other passages in which ἀλλήλων cannot be interpreted with any reference to reci-

proximity. In *Odyss.* xii. 102, ἀλλήλων must be equivalent to ἑτέρου if the present punctuation is retained:

τὸν δ' ἕτερον σκοπέλον χθαμαλώτερον ὄψει, Ὀδυσσεῦ,
πλήσιον ἀλλήλων καὶ κεν διοϊστέυσαις.

* But it is better, perhaps, to understand it as if it were written οἱ σκοπελοὶ πλήσιόν εἰσιν ἀλλήλων, putting a full stop at the end of the first line. In such words as ἀλληλοῦχος, ἀλληλονχία, the idea of reciprocity is merged in that of contiguity or union.

Besides ἐπάλληλος we have ἐπαλλόκαρπος and ἐπαλλόκαυλος in Theophrastus (*Hist. Plant.* iii. 18), with the same meaning of reciprocity. The use of ἐπαλλάσσειν and its derivatives, in the sense of alternation or interchange, is very common. Thus in Homer (*Iliad* xiii. 359) we have:

τῷ δ' ἔριδος κρατερῆς καὶ ὁμοῖον πολέμοιο
πεῖραρ ἐπαλλάξαντες, ἐπ' ἀμφοτέροισι τάνυσσαν,

i. e. "alternating the rope of war, pulling it now to one side, now to the other, fighting with various success." The metaphor is taken from a game, in which two people tried their strength by pulling at a rope, which is also alluded to in *Iliad* xi. 336:

ἐνθα σφι κατὰ ἴσα μάχην ἐτάνυσσε Κρονίων.

The Homeric ἐποίχεσθαι also expresses reciprocity, especially when it means "to walk backwards and forwards in weaving;" comp. ἰστὸν ἐποικομένην (*Iliad* i. 31) with Pindar's ἰστῶν παλιμβάμους ὁδούς (*Pyth.* ix. 18).

The word ἐπαλλαγή is used by Herodotus (i. 74) to express an interchange of matrimonial relations between two families: καὶ γάμων ἐπαλλαγὴν ἐποίησαν Ἀλυάττεα γὰρ ἔγνωσαν δοῦναι τὴν θυγάτρεα Ἀρνήνιν Ἀστύναγεί τῷ Κναξάρεω παιδί. On the similar word ἐπάλλαξις, see Wytttenbach on Plutarch (*Moral.* i. 2, p. 885). In this sense ἐπιγαμία is used (Herodot. ii. 147); it also denotes a *jus mutui connubii* between two states or parties in a state (Wolf *ad Demost. Leptin.* p. 282). The word ἐπαλλάττειν is used to express an interchange or interlacing in a material sense in the following passages: τὰ μὲν ἐστὶ καρχαρόδοντα αὐτῶν — τὰ δὲ ἀνεπάλλακτα — καρχαρόδοντα γὰρ ἐστὶν ὅσα ἐπαλλάττει τοὺς ὁδόντας τοὺς ὀξεῖς (Aristot. *Hist. Anim.* i. c. i, p. 501 Bekker); ἀρχέων τῶν νέρων ἡ ἐπαλλαγή, "the interlacing of the ends of the muscles" (Aretæus, p. 34 B Boerhaave); and a line or two lower down in the same page, ἀλλήλοισι ἐπαλλαξάμενα εἰς χιασμὸν σχήματος, "interlacing with one another like the letter χ." In a metaphorical sense ἐπαλλάττειν is applied to express verbal ambiguities; thus, Xenophon, *Mem.* iii. 8, § 1: μὴ πη ὁ λόγος ἐπαλλαχθῇ, "lest your words be perverted." Aristot. *Polit.* i. 6 (p. 1255, l. 13 Bekker): αἵτιον δὲ ταύτης

ἀμφοιβητήσεως καὶ ὁ ποιεῖ τοὺς λόγους ἐπαλλάττειν, ὅτι...ἐπεὶ διαστάντων γε χωρὶς τούτων τῶν λόγων, κ.τ.λ. "that which makes the arguments run into one another and interchange...for if they were kept distinct,...&c." In this sense ἐπαμφοτερίζειν is very frequently found: ἐπαμφοτερίζαι. εἰς ἀμφοιβολίας ἀγαγεῖν τὸν λόγον (Timæus, *Lex. Plat.* s. v.): see also Suidas and Hesychius. Plato, *Euthydemus*, p. 500 D: ὁ ἀδελφός σου ἐξημφοτέρηκε τὸν λόγον.—*Resp.* v. p. 479 B: τοῖς ἐν ταῖς ἐστιάσεσιν ἐπαμφοτερίζουσιν ἔοικε—καὶ γὰρ ταῦτα ἐπαμφοτερίζειν.—*Schol.* ad Aristoph. *Pac.* 849: ἐπαμφοτερίζοντως λέλεται καὶ πρὸς τὸ πρᾶγμα καὶ πρὸς τὸ ἄσέλγες. *Id.* ad *Plutum*, 635: παίζων γὰρ ἐπαμφοτερίζούσας λέξεις ἔθηκεν. The word also occurs in the sense of "to fluctuate," "to waver between two parties or opinions:" ἐπαμφοτερίζειν, τὸ μὴ παρίως ἐν τι βουλευέσθαι καὶ πράττειν, ἀλλὰ καὶ τότε καὶ τότε διανοεῖσθαι (*Bekkeri Anecd.* p. 41), as we see in Thucyd. viii. 85: φθείροντα τῶν Πελοποννησίων τὰ πράγματα μετα' Ἀλκιβιάδου καὶ ἐπαμφοτερίζοντα. Plat. *Phædrus*, p. 257 B: ἵνα καὶ ὁ ἔραστής ὅδε αὐτοῦ μηκέτι ἐπαμφοτερίξῃ. If it be objected to the connexion between ἐπί and ἀμφί that the compound ἐπαμφοτερίζω could not in that case be formed without tautology, we need only remark that ἐπί and ἀμφί had become in time different, though cognate, prepositions, and their use in the same compound is not more remarkable than that of *ob* and *amb-* in the verb *obambulo*.

The same idea of reciprocity is conveyed by ἐπαμείβειν and ἐπαμοιβαδῖς. It may also be inferred that ἐπίχειρα in the sense of reward or punishment contains the same notion; ἐπίχειρον. ἀνταπόδοσις, Hesychius; τὰ πείχειρα. τὸν μισθόν, τὰς ἀμοιβάς, Suidas. Hence Æschyl. *Prometh.* 327: τοιαῦτα μέντοι τῆς ἄραν ὑψηγρόρου γλώσσης, Προμηθεῦ, τὰ πείχειρα γίνονται. The 28th line of the same play: τοιαῦτ' ἀπηνύρω τοῦ φιλανθρωποῦ τρόπου is explained by the Scholiast: τὰ τῆς φιλανθρωπίας ἐπίχειρα τοιαῦτα σοὶ ἐγένετο, probably, as Hemsterhuis suggests (*ad Lucian.* i. p. 106, p. 370 Lehm.), with reference to line 327. Plato, *Resp.* x. p. 608 C: τὰ γε μέγιστα ἐπίχειρα τῆς ἀρετῆς καὶ...ἄλλα. In Sophocles, *Antig.* 814, οὔτε ξιφείων ἐπίχειρα λαχούσα, punishment is implied: but in the Greek idea of punishment, that of an equivalent or *quid pro quo* was always included. The word ἐπίχειρα is of course intimately connected in meaning and, ultimately, in origin with ἐπιχωρῆσθαι, "to have an habitual interchange of kindnesses with any one." Thus, Herod. iii. 99: ἦν δὲ γυνὴ κάμη, ὡσαύτως αἱ ἐπιχωρῶμεναι μάλιστα γυναικες ταῦτα τοῖσι ἀνδράσι ποιεῦσι. Thucyd. i. 41: ἀξίωσιν χάριτος τοιάνδε ἦν οὐκ ἐχθροὶ ὄντες ὥστε βλάπτειν οὐδ' αὖ φίλοι ὥστ' ἐπιχωρῆσθαι ἀντιδοθῆναι ἡμῖν ἐν τῷ παρόντι φάμεν χρῆναι. Plato, *Legg.* xii. p. 953 A: ἀναγκαῖα μὲν ὡς ὀλίγιστα δὲ ἐπιχωρομένους. The same meaning of reciprocity is con-

veyed by *ἐπιμαχία*, "an alliance for mutual defence," as distinguished from *ξυμμαχία*. Thus Thucyd. i. 44: *ξυμμαχίαν μὲν μὴ ποιησάσθαι, ὥστε τοὺς αὐτοὺς ἐχθροὺς καὶ φίλους νομίζειν... ἐπιμαχίαν δὲ ἐποιήσαντο, τῇ ἀλλήλων βοηθεῖν*. v. 48: *ἀρκεῖν τὴν ἐπιμαχίαν, ἀλλήλοις βοηθεῖν, ξυνεπιστρατεύειν δὲ μηδενί*. Ammon. *περὶ διαφ. λεξ.*: *Συμμαχεῖν καὶ ἐπιμαχεῖν διαφέρει· συμμαχεῖν μὲν γὰρ λέγουσιν τὸ σὺν ἑαυτοῖς, φησὶ Αἰδύμος, εἴτ' αὐτοὶ ἐπίοιεν πολεμίοις εἴθ' ἕτεροι ἐπιστρατεύοιεν. ἐπιμαχεῖν [δὲ] ὅτε τοὺς ἐπiónτας ἀμύνονται μόνον* (according to Valckenaer's emendations). It is probable that the difficulty which has been occasioned by the description of the breadth of the long wall in Thucydides, i, 93, is entirely due to a misconception of the meaning *ultra citroque agere*, which is conveyed by *ἐπάγω*. The words are: *δύο γὰρ ἑμαξαὶ ἐναντία ἀλλήλαις τοὺς λίθους ἐπήγρον*, "two wains passing one another on the top of the wall brought the stones in different directions," i. e. like the trucks used in making the viaduct of a railway. Words formed with the preposition *ἐπὶ* are also used of actions which take place on the borders of two countries, or on debatable land: for then a reciprocity, a motion in both directions, a *hin und her*, as the Germans say, is implied. Thus, *ἐπεργασία* is "a communion of husbandry between two neighbouring states," "a mutual right of ploughing in one another's lands:" and *ἐπινομία* is the same with regard to pasture. Xenoph. *Cyrop.* iii. 2, § 23: *ἐπιγαμίας δὴ εἶναι καὶ ἐπεργασίας καὶ ἐπινομίας καὶ ἐπιμαχίαν δὲ κοινήν, εἴ τις ἀδικοίη ὁποτέρους*. Plato, *Legg.* viii. p. 843 c: *τῶν τε ἄλλων πέρι καὶ δὴ καὶ ἐπεργασίας συμπάσης... ὃς δ' ἂν ἐπεργάζηται τὰ τοῦ γείτονος ὑπερβαίνων τοὺς ὄρους*. Aristot. *Polit.* v. 4, 5: *τῶν εὐπόρων τὰ κτήνη ἀποσφάξας λαβὼν παρὰ τὸν πόταμον ἐπινέμονται*. The verb *ἐπινέμειν* is also used when a common trespass on the part of a neighbour is spoken of, as in Demosth. in *Calliclem*, p. 1274: *καὶ τῶν γειτόνων ἐπινεμόντων ἅμα καὶ βαδιζόντων διὰ τοῦ χωρίου, τὴν αἰμασίαν περιφθορόμησε ταύτην*. From the fact that the debatable land between two countries was generally left untilled, *ἐπεργασία* is also applied to the cultivation of such land, or generally to the appropriation of sacred or public property. Aristot. *Rhet.* i. 13 (p. 1374 A Bekk.). *ἐπεργάσασθαι μὲν ἀλλ' οὐ δημόσια*. Diodor. Sicul. xvi. 23: *οἱ δὲ Φωκεῖς ἐπεργασάμενοι πολλὴν τῆς ἱερᾶς χώρας*. From not observing this use of *ἐπὶ* in composition, every one, so far as we know, has misinterpreted an interesting passage in Æschylus (*Agamemnon*, 444):

γυναικὸς αἰχμῆ πρόπει

πρὸ τοῦ φανέντος χάριν ξυναινέσαι.

πιθανὸς ἄγαν ὁ θῆλυς ὄρος ἐπινέμεται

ταχύπορος. ἀλλὰ ταχύμορον

γυναικογῆρτον ὄλλυται κλεός.

Without dwelling on the absurdities of the commentators, it will be sufficient, after what we have already said on the meaning of *ἐπινέμειν*, to translate the passage. The Chorus says: "It is in accordance with the disposition of a woman" (so *Choeph.* 630: *γυναικίαν ἄτολμον αἰχμάν*: *αἰχμή* is connected with *αἰσσω* root *αἰκ-*, as *δραχμή* is with *δράσσω* root *δρακ-*) "to express her gratitude before the good luck really appears. From excessive credulity, the boundaries of a woman's mind are easily encroached upon. But a good report set on foot by a woman perishes by a speedy fate." (For the sentiment we may compare Tacitus, *Annal.* xiv. 4: *facili feminarum credulitate ad gaudia*). Here, *ὄρος* is used by a strong, but very intelligible metaphor, just as in v. 1077 of the same play (*πόθεν ὄρους ἔχεις θεσπεσίας ὁδοῦ κακοδόμημονας*). Similarly Menander says: *τοὺς τῆς γαμετῆς ὄρους ὑπερβαίνεις, γύναι* (*Ιερεῖα*, 80); cf. Plat. *Legg.* 843 c, quoted above. Another word of some difficulty, in which we believe *ἐπί* is found with this sense, is *ἐπιραβδοφορεῖν*, which signifies to gallop, as applied to a horse. This meaning is generally supposed to be derived from the *ῥάβδος*, or riding-whip, with which the rider struck his steed in order to quicken its motion. Passow compares it with *ἐπισείειν*, which is used in much the same sense: but we are convinced that this last word is derived from the act of shaking the rein in order to urge on the horse, a practice to which allusion is frequently made in the Greek writers. Thus Soph. *Antig.* 109:

*φνγάδα πρόδρομον ὄξυντέρω.
κινήσασα χαλινῶ,*

which the editors have generally misunderstood. Euripides, *Iphig. Taur.* 909: *ᾧσθ' αἵματηρὰ στόμι' ἐπεμβαλεῖν ἐμοί*. The Furies put their bits into the mouth of Orestes, and, by shaking the rein till the snaffle was covered with blood, urged him to furious flight: see *Alcest.* 495: *χαλινὸν ἐμβαλεῖν γνάθοις*. The passage in Xenophon in which the word *ἐπιραβδοφορεῖν* occurs, is as follows (*de Re Equestri*, vii. 11): *μετὰ δὲ ταῦτα τὸν αὐτοφνῆ διατροχάζων διαχαλῶν τ' ἂν ἄλυπότατα τὸ σῶμα καὶ εἰς τὸ ἐπιραβδοφορεῖν ἥδις τ' ἂν ἀφικνοῖτο, ἐπειδὴ περ καὶ ἀπὸ τῶν ἀριστερῶν ἄρχεσθαι εὐδοκίμωτερον, ᾧδ' ἂν μάλιστα ἀπὸ τούτων ἄρχοιτο εἰ διατροχάζοντος μὲν, ὁπότε ἀναβαίνοι τῷ δεξιᾷ, τότε σημαίνει τῷ ἱππῶ τὸ ἐπιραβδοφορεῖν. τὸ γὰρ ἀριστερὸν μέλλον αἰρεῖν ἐκ τούτου ἂν ἄρχοιτο*. Now it is quite clear from this passage that *ἐπιραβδοφορεῖν* applies to an action, not of the rider, but of the horse, and this action is the gallop, for the whole passage is about the change from the trot to the gallop. The Greek work for "to trot" is, as we see here, *διατροχάζειν*, "to make two wheels," for, as every one knows, when a horse trots, he makes semicircles with his legs first on one

side of the body, and then on the other: so that the hind and fore feet on the same side occasionally touch. Hence Aristotle mentions it as a fault in sculpture if the artist represented τὸν ἵππον ἄμφω τὰ δεξιὰ προβεβληκότα (*Poet.* xxiv. 4). To this Virgil also alludes in the *Georgica*, iii. 192, where he speaks of breaking in the horse:

At, tribus exactis, ubi quarta accesserit æstas,
Carpere mox gyrum incipiat, gradibusque sonare
Compositis, sinuetque alterna volumina crurum.

Which Voss, with his usual accuracy, translates “und erhebe die wechselnde Krümme der Schenkel.” That Virgil is here talking of the trot is farther obvious from his allusion to the gallop, which immediately follows:

tum cursibus auras
Tum vocet, ac per aperta volans, ceu liber habenis,
Æquora, vix summa vestigia ponat arena.

It appears then that the word which expressed the action of trotting was derived from the appearance of the horse's legs in trotting: accordingly, we should expect that the same would be the case with the word expressing the gallop. Now the primary idea in ῥάβδος is “beating,” “striking,” “an instrument to strike with”—ῥάσσειν, ῥαπίζειν; and it appears to have been one of the chief functions of the ῥαβδοῦχος or ῥαβδοφόρος, to inflict the punishment of stripes; see Thucyd. v. 50: ὑπὸ τῶν ῥαβδούχων πληγὰς ἔλαβεν; and when a horse gallops or canters he strikes the ground *alternately* with his fore and hind feet. This therefore, is expressed by ἐπιραβδοφορεῖν.

175 The use of ἐπὶ to signify combination or coexistence may also be considered as a trace of this preposition's original identity with ἀμφί. Thucyd. ii. 101: ὑποσχόμενος ἀδελφὴν δώσειν καὶ χρήματα ἐπ' αὐτῇ. Soph. *Antig.* 555: οὐκ ἐπ' ἀρῶρήτοις γε τοῖς ἑμοῖς λόγοις. *Ibid.* 759: ἐπὶ ψόγοισι δειννάζειν. Eurip. *Ion*, 235: ἐπ' ἀσφάκτοις μήλοισι. In this way ἐπὶ is especially used when dishes are spoken of as eaten together: thus Aristoph. *Equit.* 707: ἐπὶ τῷ φάγῳις ἡδιστ' ἄν; ἐπὶ βαλαντίῳ; *Pax*, 123: ἔξετ' ἐν ὥρῃ κολλύραν μεγάλην καὶ κόνδυλον ὄψον ἐπ' αὐτῷ. *Acharn.* 835: παίνει ἐφ' ἀλλ' τὴν μάδδαν. Xen. *Mem.* iii. 14, § 2: ἐσθίειν ἐπὶ τῷ σίτῳ ὄψον. *Cyrop.* iv. 2, § 27: ἐπὶ τῷ σίτῳ πίνειν, and even in metaphorical expressions, as when Pindar says (*Pyth.* iv. 187 Böckh):

ἡμιθέοισιν πόθον πρόσδαιεν Ἥρα
ναὸς Ἀργοῦς, μή τινα λειπόμενον
τὴν ἀκίνδυνον παρὰ ματρὶ μένειν αἰῶνα πέσσοντ', ἀλλ' ἐπὶ καὶ θανάτῳ
φάρμακον κάλλιστον ἔς ἀρετᾶς ἄλιξιν εὐρέσθαι σὺν ἄλλοις.

i. e. "Juno kindled in the minds of the heroes a longing for the ship Argo, so that no one might brook to be left behind and remain by his mother's side, leading the sodden, insipid life which is free from danger, but that each might strive to obtain in company with his mates a seasoning or relish even for death itself, in his own glory and renown." (On this sense of ἀρετή, see Pindar, *Olymp.* vii. 163; Thucyd. i. 33; Sophocl. *Philoct.* 1406; *Bekker Anecd.* p. 443, 33, &c.). It is quite a mistake of Matthiæ (*Gr. Gr.* § 586) to suppose that ἐπί has this force in sentences like οὗς ἐπὶ θυγατρὶ ἀμήτορι—ἐπὶ ταύτῃ ἔγημε ἄλλην γυναικα. ἡ δὲ ἐπεσελθοῦσα ἐδικαλεῖν εἶναι καὶ τῷ ἔργῳ μητρονὴ τῇ Φρονίμῃ (Herod. iv. 154). Here ἐπὶ has the sense of coming into a family as a stranger, in which sense Schiller, in *The Song of the Bell*, most naturally calls a step-mother "the stranger:"

An verwaister Stätte schalten
Wird die Fremde, liebeleer.

That such is the meaning of ἐπὶ when applied to a step-mother is proved by the ἡ ἐπεσελθοῦσα in Herodotus, and by the following passage of Euripides (*Alcestis*, 305):

καὶ μὴ' πιγήμευς τοῖσδε μητροίαν τέκνοισ—
ἐχθρὰ γὰρ ἡ' πιούσα μητροῖά τέκνοισ
τοῖς πρόσθε.

176 We now proceed to the considerations of those prepositions of which the leading idea is motion *from* or *out* of some given place. The shortest and simplest of these is ἐκ or ἐξ, which is written *e* or *ex* in Latin. Various conjectures have been made with regard to the origin of this little word. Pott supposes (*Etym. Forsch.* ii. p. 183) that it is connected with the Sanscrit *vahis* (*extra*); that the *-his* is represented by the Greek -ξ, and that a digamma has fallen out in the Greek word; he recognises the same root in the Sanscrit *ava* (off, from), and considers οὐκ to be the same word with *avak* (*deorsum*). Hartung (*Partikeln*, ii. 81) looks upon ἐκ as a subsidiary form of οὐκ. It is true that οὐκ and ἐκ are the only words in the Greek language which ever end in κ, but it must be recollected that one of the words is written with a κ just where the other throws off the κ, and as this κ is the only letter they have in common, it would be rather rash to assume their identity on such a ground as that. We reserve the consideration of οὐ, οὐκ for the next chapter. It is clear to us that the ἐκ, ἐξ (ἐκς) bear the same relation to one another that subsists between ἐν and εἰς (ἐνς), and that ἐξ is the original and proper form of the word. It is perfectly analogous to ἄψ, the old Homeric form of ἀπό, and there are words of great antiquity into which ἐξ enters. It has

been the lot of this preposition more than any other to suffer mutilation when used in composition. Thus we have *κ-ροῦνος* and *κ-ρήνη* from *ἐκ-ρέειν*, and, what is more to our purpose, *ξένος* from *ἐξ*, and the locative *ἐς* = *ἐνς* = *ἐν(ο)ς*. Comp. *étranger*, *extraneus*, *straniero*. We have no doubt that *ἐξ* is, as we have mentioned before, a compound of the demonstrative stem *a* or *e*, in this case a mutilation of *να*, with the second pronominal element under the form *-κς*, so that, according to the principle of composition before explained, it expresses a removal from the *there* through that which is *near to the here*, and therefore naturally expresses "out of." We have still more mutilated forms of it in the Gothic *us*, Slavonic *iz*, Lithuanian *isz*, old Prussian and Lettish *is* (Grimm, III. p. 253); for we have already seen that the Lithuanian *sz* at any rate is a representative of the Greek guttural (above, p. 201). The adverb *vahis*, with which Pott connects *ἐκ-ς*, should rather be compared with *ἄψ*, *abs*, and the Slavonic *bez*.

For our purpose this preposition presents little that is deserving of notice. Its meaning is generally fixed with great accuracy, and it seldom occasions any difficulty. The only word in which its usage appears to be really anomalous is *ἐκθνήσκειν*, which, though at first sight it might be thought a synonym of *emori*, "to die the death," is always used to signify "fainting," "seeming dead." Thus Homer, *Odys.* XVIII. 100: *ἄταρ μνηστῆρες ἀγανοὶ χεῖρας ἀνασχομένοι γέλω ἐκθانون*—which is precisely our idiom "died with laughter." Soph. *Trachin.* 568: *ἐκθνήσκων δ' ὁ θῆρ τοσοῦτον εἶπε*, "the monster, as he was fainting away, said just so much." Plato, *Legg.* XII. p. 959 A: *τὰς δὲ προθέσεις πρῶτον μὲν μὴ μακρότερον χρόνον ἔνδον γίνεσθαι τοῦ δηλοῦντος τὸν τε ἐκτεθνέωτα καὶ τὸν ὄντως τεθνηκότα*, "the apparently dead," as opposed to "the really dead." Hippocr. *Morb. Vulg.* v. 7: *καὶ ἐξέθανε πεντάκις, ὥστε τεθνάναι δοκέειν* (comp. *Abresch. ad Æschyl. Agam.* 569). Plutarch, *de serâ Num. Vind.* p. 563 D: *κατενεχθεὶς ἐξ ὕψους τινός, οὐ γενομένου τραύματος ἀλλὰ πληγῆς μόνον, ἐξέθανε καὶ τριταῖος ἤδη περὶ τὰς ταφὰς αὐτὰς ἀνήνεγκε*. Ælian, *Hist. An.* VIII. 7: *τὸν ἀψάμενον λειποθυμεῖν καὶ ἐκθνήσκειν τὰ πρῶτα, εἶτα μέντοι καὶ ἀποθνήσκειν*. Hesychius: *ἐξέθανεν· λειποθυμήσεν*. The origin of this meaning is the opposition of the *outward* and *seeming* to the *intrinsic* and *real*. It is very well explained by Eustathius in his note on the passage of Homer just quoted: *δῆλον δὲ ὡς ἀφέλως καὶ γλυκέως τὸ ἄγαν γελάσαι γέλωτι ἐκθανεῖν λέγεται, ἥρουν ἕξω, καὶ, ὡς εἰπαῖν, ἐπιπολαίως θανεῖν, καὶ οὐ κατὰ τὸ κυρίως θανεῖν*. The verb *ἐκφέρω* also presents some peculiarities of usage; for while in a very common application it signifies to carry out a corpse to burial, the effect of which, by the nature of the case, is a short concealment and seclusion (as is shown by the Latin words *se-pelio*, &c.; Gothic

filhan, Gr. *φυλ-άσσειν*), on the other hand, it means, with more continuous reference to its origin, a publishing abroad or promulgation of that which ought not to be concealed. The former meaning needs no illustration; it is as old as Homer (*Il.* xxiv. 786); it is recognised by the legal phraseology of Athens (*ἐκφέρειν ἀποθανόντα*, Demost. p. 1071, 2); and is represented also by the Latin *effero*. With reference to this sense *ἐκφορά* means "a funeral," and perhaps there is truth in the suggestion that Æschyl. *Eumenid.* 910: *τῶν δυσσεβούντων δ' ἐκφορωτέρα πέλοις*, means "mayest thou rather carry off the impious as corpses" (see Müller, *Eumeniden*, p. 178). The other meaning of *ἐκφέρειν* is found in such passages as Eurip. *Hippol.* 650: *νῦν δ' αἱ μὲν ἔνδον δρῶσιν αἱ κακὰ κακὰ βουλευμάτων, ἔξω δ' ἐκφέρουσι πρόσπολοι*. From this sense we pass easily to that of commemoration or celebration, as in Soph. *Trach.* 791: *τίν' ἐξήνεγκας, ᾧ τέκνον, λόγον;* hence it means in the middle voice, "to carry off *for oneself*, to get the credit of, or to be celebrated on account of some thing." So we have in Soph. *Electr.* 60: *τί γάρ με λυπεῖ τοῦθ' ὅταν λόγῳ θανῶν ἔργοισι σωθῶ, κάξενέγκωμαι κλέος;* *Trachin.* 497: *μέγα τι σθένος ἂ Κύπρις ἐκφέρεται νίκας ἀεί*. Demoth. p. 178, 7: *τοῦ δοκεῖν εὖ λέγειν τὴν δόξαν ἐκφέρονται*. Xen. *de venat.* 1, 15: *δόξαν εὐσεβείας ἐξηνέγκατο*. In the signification "to lead out of a crowd, to conduct from a confusion of surrounding objects to a definite end or goal," *ἐκφέρειν* is used both transitively and intransitively. Thus, of a road or path, Plato, *Phæd.* p. 66 B: *κινδυνεύει τις ὥσπερ ἀτραπὸς ἐκφέρειν ἡμᾶς μετὰ τοῦ λόγου ἐν τῇ σκέψει*: of a scent in hunting, Soph. *Aj.* 7: *εὖ δέ σ' ἐκφέρει κυνὸς Λακαίνης ὥς τις εὐρινος βάσις*; and intransitively of the fulfilment of oracles, Soph. *Ed. Col.* 1424: *ὁρᾷς τὰ τοῦθ' οὖν ὥς ἐς ὁρθὸν ἐκφέρει μαντεύμαθ', ὃς σφῶν θάνατον ἐξ ἀμφοῖν θροεῖ*. So we say in English, "a road leads to such a place;" "this conduct leads to certain ruin," &c. For the similar employment of *διά*, see above, §. 150. Another use of *ἐκφέρειν* is to express that something has been cast on shore, from, or out of the sea, as Eurip. *Hec.* 701: *πόντου νιν ἐξήνεγκε πόντιος κλύδων*. We mention these significations, not because they are at all unknown or recondite, but merely because their connexion is inadequately recognised by commentators and lexicographers.

177 The prepositions *ἀπό* and *παρά* also express motion from a place. The former corresponds to the Sanscrit *apa*; its original form was *ἀ-πό-ς*, for *ἀν-πός* or *να-πός*, and as such it denotes motion from a distant object to the *subject*. This etymology is in accordance with the distinction always observed between *ἀπό* and *ἐξ* as denoting motion from the *surface* and *interior* respectively of a distant object; for in *ἀ-πό* we go straight from the remote to the *here*; while in *ἐ-ξ* we pass through intermediate proximity. Hence *ἀπο-δύομαι* means "I

put off my *ἱμάτιον* or outer garment;" *ἐκ-δύομαι*, "I put off my *χιτῶν* or inner garment" (Lysias, *c. Theomn.* § 10); and *ἀπεκδύομαι*, "I strip or divest myself altogether" (Paul, *Col.* ii. 15). The preposition *παρά* is related to the Sanscrit *para*, and as a compound of the first pronoun *pā*=*mā* (compare *πέ-δα, με-τά*) with *-rā* denotes primarily motion from the subject, and, by a secondary sense, conveys generally the idea of motion connected with that of closeness, and may even signify motion to the subject. For *para* we also find *apara*, which is only the comparative of *apa*, that is, *apa* with the suffix *-ra*, which we have before explained; there is also a superlative *parama* (see Schlegel's *Indische Bibliothek.* i. p. 362). In its ordinary use, *para* is an indefinite pronoun, and is equivalent to *ἄλλος*, *alius*, the relative meaning of which we have before discussed. When we compare *para*, *pâr*, *παρά*, *πέραν* (Sanskrit *param*), *πεῖρειν*, *per*, *peren-die*, *πέρυσι**, with *π-ρό-ς*, *πάρος* (Sanskrit *purâs*), *præ*, *pro* (Sanskrit *pra*) *πρω-τῖ*, (whence *pru-ina*), on the one hand, and *περί*, Sanscrit *pari*, on the other hand, we shall find it impossible to believe that the Greek prepositions *πρό*, *παρά* (*παραι*), and *περί*, and the Latin *pro*, *præ*, *per*, are not etymologically connected. Nor is there much difficulty in reconciling their various meanings. The essential part, the expression of the *here*, is the same in all the words which we have compared above; the only variation is in the affix, which is written *ro-s*, *ra*, *ri*. Let us examine the force of these terminations in the Greek: (1) *π-ρό* or *πά-ρο-ς*, signifies "that which is before the subject;" *π-ρό-ς*, *π-ρο-τί*, denotes "motion towards that which is before the subject" when joined with the accusative; "mere direction" when joined with the genitive†; and "closeness" when joined with the dative; in this last collocation it also signifies, by a very natural transition, "adding" or "superimposing:" (2) *παρά* is found with the same three cases, and in its general use corresponds pretty nearly to *π-ρό-ς*, except in its use with the genitive, when it invariably means that something is taken away from some other thing; it is true there is an appearance of the same force in such phrases as *πρὸς πατρός, μητρός*, "on the father's, mother's side," *οἱ πρὸς αἵματος*, "blood-relations," *αἵτε θεμιστας πρὸς Διὸς εἰρύνεται*, "by commission from Jupiter" (*Iliad* i. 239), *οὐδ' ἄκλεις νιν δόξα πρὸς ἀνθρώπων ὑποδέξεται*, "proceeding from men" (Eurip. *Heracl.* 625), and in the other examples cited by Matthiæ; but the more general use of *π-ρό-ς* is unquestionably to denote motion, not

* On the connexion of *πέραν* and *πέρυσι* compare "*Ἡπειρος* = ἡ *διὰ-πέραν χώρα* with its epithet *διαπρυσίος* (above, § 150).

† On the vague uses of *πρός* and *παρά* with the genitive, see *Gr. Gr.* Art. 486, obs. i.

from, but to, a place before us: (3) *πε-ρί* generally signifies, when joined to the genitive, "relation;" when joined to the dative, "closeness," "on," "about;" when joined to the accusative, it denotes "motion or extension around," and answers to the question "whither?" "where is it moving?" We see, then, that the general difference in meaning between *π-ρός*, *πα-ρά*, *πε-ρί*, is very slight; indeed in some cases their meaning is so nearly the same, that one of the three might be substituted for either of the others without materially affecting the sense. Thus, with the dative, in the sense of *apud*, we have *πρός μέση ἀγορᾷ* (Sophocl. *Trach.* 371, comp. *ἐν μέσῃ ἀγορᾷ*, *Ibid.* 423), *παρὰ τυραννίδι* (Pind. *Pyth.* II. 159), *περὶ Σκαιῇσι πύλῃσι* (*Iliad* XVIII. 453); with the accusative, in the sense of *secundum*, "with respect to," we have *τέλεος πρὸς ἀρετήν* (Plat. *Alcib.* I. p. 120 E), *πονηρὸς περὶ τι* (Plat. *Resp.* v. *ad init.*); and in the sense of *propter*, "on account of," we have *πρὸς ὧν τὴν ὄψιν ταύτην τὸν γάμον τοι τοῦτον ἔσπευσας* (Herod. I. 158), *ἐκαστος οὐ παρὰ τὴν ἑαυτοῦ ἀμελείαν οἴεται βλάψειν* (Thucyd. I. 141). We have another proof of their identity in the way in which the Latin prepositions are used to express the meaning of these three. Thus *præ*, which bears more outward resemblance to *πα-ρά*, is used as a synonym for *περὶ* in *præ metu*, *περὶ τάρβει*: *per*, which externally resembles *περὶ*, is used as a synonym for *παρὰ* in such phrases as *παρὰ τοῦτο*, *per hoc*: also *præ-ter*, the comparative of *præ*, in *παρὰ δόξαν*, *præter opinionem*: *præ* is also used for *περὶ* in such sentences as *περὶ πάντων*, *præ omnibus*; also *præ* and *per* are sometimes synonyms; cf. *non possum præ fletu* (Cic. *Att.* XI. 7), and *neque per ætatem potis erat* (Ter. *Eun.* I. 2, 32): *per* is used in Latin, where *πρός* is in Greek, to express the person called upon to witness an oath: and *πρός* and *per* are used in the same way with a neuter adjective in an adverbial sense: compare *πρός τάχος* for *ταχέως* (Plato, *Legg.* VII. p. 810 B) with *per tacitum* for *tacite* (Virgil, *Æneid* IX. 30): *περὶ* and *per* agree in the intensive sense; compare *περικαλλής* with *perpulcer*.

178 There is one use of the preposition *περὶ* which is not found in any of the cognate prepositions, except in the Sanscrit *pari*. These words frequently mean "round about," like the Greek *ἀμφί*, the German *um*, and the Latin *circum*; and *περὶ* designates, by an association which we have already explained, not only that which surrounds, but also that which is surrounded. The former meaning is due to a connexion of the ideas of *closeness* and *removal* in this word; the last vowel seems to point to the fragment of a case denoting rest, and the termination *ra* indicates motion. It may, therefore, be surmised that the whole word denotes motion confined to a sphere of action not far

removed from the subject. The other meaning has, perhaps, arisen from the wider signification of *πα-ρά*, which seems to denote simply motion from the subject; and this has generated the ideas of "going through," "piercing," "boring a hole," conveyed by *περί* and its derivatives *πείρω*, *περυνή*, *πορπή*. That *περί* does bear this meaning appears from a well-known line in Sophocles (*Ajax*, 890):

ἐν ῥάῳ οἱ χθονὶ
πηκτὸν τόδ' ἔγχος περιπετὲς κατηγορεῖ.

Lobeck approves of the interpretation of Eustathius (p. 644, 7). *Σοφοκλῆς ἔγχος περιπετὲς εἰπεῖν ἐτόλμησεν, ᾧ περιπέπτωκεν Αἴας*. This interpretation has obviously been suggested by two other lines in the same play—*πεπιῶτα τῷδε περὶ νεοῖδ' ἀντῷ ξίφει* (815), and *κεῖται κρυφαίῳ φασγάνῳ περιπτυχῆς* (883). But these passages have nothing to do with the proper interpretation of *περιπετὲς* in the former one: the construction of that line is obvious, and though it is true that *περί* generally denotes that which is round any spot, and not a round hole, it does not follow that it may not have borne the other signification also. Lobeck quotes the following passages in illustration of the line in Sophocles; Ælian, *Hist. An.* xv. c. 10: *ἄγκιστρα περιπαρέντα τοῖς ἰχθύσι*; Liban. *Decl.* Tom. iv. p. 1081: *ὁδόντες τῇ δείρῃ περιπείρονται*; Chrysostom, *Opp.* Tom. III. 85 A: *ἐαντῷ τὸ ξίφος περιέπειρε*. But the age of the authors quoted renders their authority of little value: indeed the passages prove no more than that these writers understood the line in Sophocles as we do, and had probably met with other passages like it. The following analogies are more to the purpose. It will not be denied that the ideas of "boring," "piercing," "roundness," &c. are mixed up in the family of words which includes *τόρ-ος*, *τόρ-νος*, *τορ-εύω*, *τόρ-μος*, *τι-τρά-ω*, *τι-τράινω*, *τρώω*, *τι-τρώσκω*, *τραῦμα*, *τρύω*, *τρύπη*, *τρυνάω*, &c. Now these words are unquestionably connected with one of the simplest words expressing *beyond* or *motion*: we mean the ending *-tara*, *-teros*, discussed in the last chapter. The analogies between this set of words and those we are discussing extends in many directions, both in Greek and Latin. In the first place, we have *τέρμα*, *τόρμος*, *terminus*, *trans*, by the side of *πέρας*, *πέραν* (*περάω*), "the object of a journey," "the place gone to." The words *τέρμα*, *πέρας*, also signify "an end," "a termination" in general, and verbs signifying "to end" or "finish" are frequently used in Greek to express a journey: thus *ἀνύσειν τὸν Ἀἰδαν* (*Soph. Aj.* 666), where Lobeck quotes *κατανύσας ἐξ Ἑ. ἐς Α.* (*Herod.* vi. 140); *τελεῖν ἐπὶ τὸ τέρμα* (*Lucian, Trin.* § 20); *Ἀθήνας ἐκπερᾶν* (*Athen.* ii. p. 47 c); *τέρμα βίοιο καὶ ἐς βαλβίδα περήσας* (*Oppian, Cyn.* i. 512); *ὁστοῦν εἰς τὴν ὑπερώαν περαῖνον* (*Galen, de Usu Partium*, ix. 3, 508). By the

side of *πέρας, τέρμα*, we have the by-forms *πέλας, τέλος*. In Latin the adjective *teres* is applied to signify roundness in general; *in se ipso totus, teres, atque rotundus* is said of a sphere in Horace (*Sat.* II. 7, 86). Compare Ausonius, *Id.* 16: *mundi instar habens, teres, atque rotundus*. It is also applied to a net, either because the ropes which composed it were cylindrical, and drawn through holes, or because it was full of holes, namely, the meshes. If the former is the true explanation, which is more probable, we may compare *teres* with *πείραρ*, the Homeric word for a rope (*Iliad* XIII. 359). There are two Latin words which involve the combination *pa-ra*, and which are interesting, not only in reference to the combinations just mentioned, but also as bringing us back to the liquid from of the first element—we allude to *pars* (*par-t-s*) and *paries* (*pari-et-s*). We cannot doubt the affinity of the former to its Greek synonym *μέ-ρος* or *μέ-λος*, which we shall discuss in a future chapter; division or partition, as we shall there show, resolves itself into the idea of a line proceeding from the subject and cutting another fixed line. The analogies, which we have mentioned above, are sufficient to show that the same or a similar idea may be conveyed without any reference to the subject, by the mere combination *ta-ra*, and it is easy to pass from *πε-ρά-ω* to *πείρω, πόρος*, &c. The notion of piercing through and separating into parts very soon suggests that of distribution and division; and from this again we get the sense of discussing and declaring at length: we see this especially in the verb *ἐνδατεῖσθαι*, which Hesychius translates by *ἀπομεριζεν*, but which is used by Sophocles (*Ed.* T. 205) to signify celebration or commemoration by word of mouth, and by Æschylus with the similar implication of repeated mention (*Sept. c. Theb.* 578, and *apud Platon. Republ.* II. 383 E; cf. *Soph. Tr.* 791). The same is the case with the Latin *disputo*, and we are disposed to seek a similar explanation for the solitary form *πεπαρεῖν* (*Pind. Pyth.* II. 57), which Hesychius explains as signifying “to display or exhibit” (*πεπαρεῖν ἐνδείξει, σημῆναι. πεπαρεῦσιμον εὐφραστον, σαφές*), and which we regard as an obsolete aorist of *πείρω*. We recognise the sense of separation and division in *paries*, “that which goes, or is a divider” (cf. *se-paro*, &c.); for *paries* is properly a party wall common to two chambers, or standing between two houses: thus it is applied to the divisions in a labyrinth, *e. g.* in Virgil, *Æneid* v. 588: *fertur Labyrinthus habuisse parietibus textum cæcis iter*; and to the walls between two houses as distinguished from the outer wall; *e. g.* in Tacitus, *Annal.* xv. 43: *nec communione parietum sed propriis quæque muris [ædificia] ambirentur*, where the last word refers to the technical term *ambitus*, which was probably used thus in the seventh of the Twelve Tables: *inter vicinorum ædificia ambitus parietum ses-*

tertius pes esto (Dirksen, *Zwölf Tafel Fragm.* p. 565). We must not be led by an apparent similarity of sound to seek for the meaning of *paries* in the Greek words *πάροδος*, *παρασκήνιον*, where the *παρά* stands in a sort of opposition to *περί* (*Theatre of the Greeks*, 6th edition, p. [152] sqq. notes), and where there is rather an implication of lateral motion. The same is signified by the military term *παριππεύω*, which means "to move cavalry along a line of battle," either for the purpose of changing its position from one wing to the other (Arrian, *Anab.* ii. c. 9, § 1), for the purpose of extending the flank (Id. *Ibid.* iii. c. 13, § 2), or for the purpose of masking the movements of a line of infantry (Id. *Ibid.* v. c. 16, § 1: *ἐξ κύκλους παριππεύων ἀνέπαυε τοὺς πεζοὺς*). Döderlein, who has seen the connexion between *paries* and *pars*, has not observed the relationship between the latter and *μέρος*, but has endeavoured to trace an affinity between *murus* and *μοῖρα*, which contains the same root as *μέρος* (*Syn. und Etym.* v. p. 350). Now it is clear that this meaning does not apply to *murus* or *mærus*, which denotes the outer wall of a city or house; see Virg. *Æn.* ii. 234: *dividimus muros et mœnia pandimus urbis*, from which Niebuhr would infer a distinction of buildings within and walls around a city (*H. R.* ii. note 80), a distinction which is not borne out by the practice of the best writers. We believe that *murus* and *mœnia* come from the same root *ἄ-μύνω*, *mænio*, which we have discussed in another part of this book, and that the only difference between the words is that *murus* is "a wall" generally, but *mœnia* a city-wall or fortification in particular.

If we place this meaning of separation by the side of the other significations of *π-ρό*, *πα-ρά*, *πε-ρί*, we see that the force of the Sanscrit pronoun *pa-ra* = *alius* is more or less conveyed by all of them, and that they are all merely modifications of the expression of *diversity* or *beyond* considered in immediate connexion with the subject; from this ground-meaning all their uses may be explained, the separate words being only different cases of the Sanscrit pronoun. This pronoun occurs directly in the Latin *par*, which is equivalent to *alter* (Pott, *Etym. Forsch.* ii. p. 230), and we may recognise it in the compounds *perendie* ("on another day") *per-(^a)grinus* ("of another country") (Bopp, *Vergl. Gramm.* p. 541), and, perhaps, in the Greek *περοφρέες*. Herodotus says (iv. 33): *τοὺς Ὑπερβορέους πέμψαι φερούσας τὰ ἱρὰ δὲ νόθας - ἅμα δὲ αὐτῇσι ἀσφαλῆς εἵνεκεν πέμψαι τοὺς Ὑπερβορέους τῶν ἀστῶν ἀνδρας πέντε πόμπους τούτους οἱ νῦν Περοφρέες καλέονται*. Some suppose this word to be another form of *περιφρέες*: Guyet (on Hesychius *sub v.*) suggests that it is a synonym of *proceres*: and Niebuhr (*Hist. of Rome*, i. p. 85) connects it with *perferre*. "If,"

he says, "it be but allowed that the people called Hyperboreans may have been a Pelasgian tribe in Italy, the possibility will, perhaps, be nearly turned into certainty when it appears that the title of the carriers was almost a Latin word." Now there is no objection to consider *περ* as standing for *περί* in this compound; see Böckh, *Not. Crit. ad Pinn. Ol.* vi. 38, *ad Fragm.* p. 631; and compare *πέρ-θω* with *per-do*, which is related to *per-eo* as *ven-do* is to *ven-eo*. We might, however, be contented to suppose that the word merely signifies "the strange" or "foreign carriers." That *περοφρέες* is connected with *φέρω* appears from the word *φερούσας* in the passage of Herodotus, and by the names *Amallophori* (Porphyr. *de Abstin.* ii. 19), *οὐλοφόροι* (Servius *ad Virg. Æn.* xi. 858), also given to these personages. There is yet another Greek word in which we recognise this root, namely *πέρ-περ-ος* (*περπερεύομαι, περπερεία*). This word, which is evidently a reduplication, means a strange, out-of-the-way, absurd person: compare the Latin *perperam, perperitudo*.

The intensive meaning, which we find in *περί* and *πέρ*, may be thought due to the idea of perfection and completeness suggested by the circle or sphere: thus Plato, *Timæus*, p. 33 B: *καὶ σχῆμα δέ, ἔδωκεν (ὁ θεὸς) αὐτῷ (τῷ κόσμῳ) τὸ πρέπον καὶ ξυγγενές· τῷ γὰρ τὰ πάντ' ἐν αὐτῷ ζῶα περιέχειν μέλλοντι ζῶῳ πρέπον ἂν εἴη σχῆμα τὸ περιειληφὸς ἐν αὐτῷ πάντα ὁπόσα σχήματα· διὸ καὶ σφαιροειδὲς ἐκ μέσου πάντη πρὸς τὴν τελευτὰς ἴσον ἄπεχον καὶ κυκλοτερές αὐτὸ ἕτορνεύσατο πάντων τελεώτατον ὁμοιότατόν τε αὐτὸ ἐαυτῷ σχημάτων.* But the same idea of completeness is found in *πέρας*, which derives it from the other and perhaps earlier sense of *περί*, namely, that of "going through," "piercing," "faring to the end;" and we believe that this is also the origin of the intensive meaning of *περί*. Compare the case of *διά* (mentioned below) and the English use of "thoroughly," "thorough-going," "through and through," &c.

179 It is easy to see that *ὑ-πό*, *ὑ-πέ-ρ*, and their Sanscrit and Latin equivalents *u-pa*, *u-pari*, *su-b*, *su-per*, are related to one another precisely in the same manner as the Sanscrit *a-pa*, *a-pa-ra*; that is to say, the latter preposition in each case denotes a continuation of the direction indicated by the former. If *ὑπέρ* is actually formed from *ὑπό*, the vowel *ο*, which represents the loss of an original *ς*, as in *ἀπό*, *πρό*, &c., has only suffered the usual attenuation in point of weight. We have already endeavoured to show that *ὑ-πό* (*su-b*, *u-pa*), is a compound of the second pronominal stem with the first, implying a motion or continuation from that which is immediately near in the direction of the subject. From this analysis it appears that *ὑ-πό*

differs from *ἄ-πό* only in supposing the point from which the motion commences to be *near to* instead of *far from* the subject, and, in fact, the most prominent signification of *upa* is "near," or "by the side of." It does indeed also denote "inferiority," but in a great many cases it approaches nearer to the meaning of *ἐπί* as implying superposition, or indeed position generally. We believe, then, that *ὑ-πό* primarily implies only a motion to the speaker from that which is near to him, the idea of "under" not being in any way directly conveyed by it, except so far as the Greeks habitually spoke of things near them as *τὰ ἐμποδών* = *τὰ ἐν ποσὶν ὄντα*, or *τὰ ἐν ποσὶ εἰλεῦμενα* (Herod. ii. 76). With the same vagueness of reference the Sanscrit *adhi* means both "over" and "under." But when by the addition of the suffix *-ra* this direction is continued beyond the subject, the ideas of "upper" and "under" arise from the correlation. *Ἵ-πό*, *su-b*, *u-pa* are related to *ὑ-πέρ*, *su-per*, *u-pari* pretty nearly as positives to comparatives. A similar relation subsists between the Gothic *uf*, *ufar*: thus in Ulfilas, *Mark* iv. 32, *ὑπὸ τὴν σκιὰν αὐτοῦ*, "under the shadow of it," is translated "*uf skadau is*," and *Matth.* x. 24, *οὐκ ἔστι μαθητὴς ὑπὲρ τὸν διδάσκαλον, οὐδὲ δοῦλος ὑπὲρ τὸν κύριον αὐτοῦ*, "the disciple is not *above* his master, nor the servant *above* his lord," stands in the Gothic version "*nist siponeis ufar laisarja: nih skalks ufar frauin seinamma*." Now "over" and "under" are both comparatives, the former being, in fact, identical with *ufar*. The simple method of explaining this difference is, to suppose that *ὑπό*, *sub*, *upa*, *uf* originally signified, "up," "upon," like *ἐπί* and *ὀβ*; and then, according to the proper use of the suffix *ra*, *ὑπέρ*, *super*, *upari*, *ufar*, would mean "upper," as the comparatives of the other set of words. The meaning of the words "over" and "under" is this, that the subject consider himself as a point in a vertical line, every point in the line, reckoning from his feet, being considered as "under," and every point in the line, reckoning from his head, being considered as "over," so that the subject is the positive, and those two words are comparatives, not in relation to one another, but to him; thus it is, that when the relations of "over," "under" are expressed by comparative forms, as in English, German, and Sanscrit, they contain different roots: for "over," *über*, *upari*, have no etymological connexion with "under," *unter*, *antar*. But "over" and "under" are really opposed to one another; they are relative terms, and are expressed as such, when, as in Greek, Latin, Sanscrit, and Gothic, they stand as positive and comparative degrees of the same word: so that, although "under" is expressed in these three languages by a word signifying "up" or "upon," it must be recollected that what is "up" in regard to one thing, is "under" in regard to that which is "upper;"

just as *τό τινι συνελθὸν καὶ ποιοῦν, ἄλλω αὖ προσπεσόν, πάσχον ἀνεφάνη* (Plato, *Theætet.* p. 157 A)*.

180 The preposition *διά* is merely a form of the second numeral: compare *διᾱκόσιοι* for *δια-εκόσιοι*, with *τριακόσιοι*, &c. Accordingly, it generally conveys the idea of “penetrating,” “dividing into two parts.” That the same root should express both the division and union of two objects is an instance of the association by contrast to which we have before drawn attention (§ 53). *δέω*=*δ-φέω* means to “couple two things,” and the converse idea of separation is manifestly presented to us in the word *δύω*, “to penetrate,” which, of course, belongs to the same origin, for in this word the vowel is always wavering between *υ* and *ι*, as we might expect, according as the labial is omitted or vocalized.

In *δί-δυμος*, a reduplicated form, we have both ways of writing the root. We have remarked before on the Sanscrit *divimātri*, which stands between *bimater* and *διμήτωρ*. It is from this connexion with the second numeral that *δίζω* is a synonym with *ἀμφισβητέω*. The separative force of *διά* is strongly expressed in such compounds as *διαφέρω*, *διασχίζω*, *διάνδιχα*, &c. In Sophocles, *Ajax*, 511, it is clear that *σοῦ διοίσεται μόνος ὑπ’ ὀρφανιστῶν μὴ φίλων* cannot be referred to such phrases as *διαφέρειν βίον αἰῶνα*. We have elsewhere shown (*Proceed. of Philol. Soc.* i. p. 164) that Herodotus, who was a constant imitator of Sophocles, has indicated the true meaning of the passive *διαφέρεσθαι* here, namely, that it refers to the embezzlement and spoliation of a minor’s goods by his dishonest guardians: cf. Herod. iii. 53: *βούλει τὴν τε τυραννίδα ἐς ἄλλους πεσείν καὶ τὸν οἶκον τοῦ πατρὸς διαφορηθέντα μᾶλλον ἢ αὐτὸς σφε ἀπελθὼν ἔχειν*; with i. 88: *πόλιν τε τὴν σὴν διαρπάξει καὶ χορήματα τὰ σὰ διαφορέει*; and Lo-beck has quoted Dio Chr. *Or.* xli. 506 c: *ὑπ’ ὀρφανιστῶν διασπασθήσεται*, which is obviously an imitation of the passage. The preposition *διά* is sometimes used emphatically, with this separative force, in the verb *διαφαίνω*. Thus we have in Pind. *Pyth.* iii. 44, *καιομένα δ’ αὐτῷ διέφανε*

* The Professor of Comparative Philology, who not only renders his own science ridiculous by the extravagant absurdity of his etymologies, but also takes every opportunity of treating its first principles with contempt, has endeavoured to evade these difficulties in the usage of the prepositions by laying down the doctrine, “that prepositions of different origin and power frequently assume an identity of form” (*Trans. of Philol. Soc.* 1854, p. 69). To suppose that there was one *unter*=our *under* and that another *unter* was akin to *ἀνά*, that one *un-* was = *ἀν-* privative, and another = *ἀνά*, and so on, is to run counter to all the principles on which scientific philology depends. We have protested against this monstrous paradox in the same volume (*Trans. of Philol. Soc.* 1854, p. 289).

πυρά, of a cloven flame; and in Thucyd. iv. 108, ἐψευσμένοις τῆς Ἀθηναίων δυνάμεως ἐπὶ τοσοῦτον ὅση ὑστερον διεφάνη, all the emphasis falls on the preposition; the meaning is that the subject-states "were mistaken in regard to the power of the Athenians, by as much as that power afterwards appeared different from their notion of it" (on the force of the ὅση after ἐπὶ τοσοῦτον, see *Greek Grammar*, Art. 555). In Latin the numeral adverb δῖς is written *bis*, the labial sound being alone retained, but, as a preposition in composition, the Greek form, δῖς or δά, is retained, the final letter when not preserved being represented either by a lengthening of the *i*, or by an assimilation with the first letter of the word with which it is compounded. Thus the Greek form is preserved in *dis-cedo*, *dis-rumpo*, &c.; it is softened into *r* in *dŕr-imo* (*dis-emo*); it is assimilated in *dif-fero* (δια-φέρω), *dif-findo* (δια-σχίζω); and represented by the long *i* in *di-lanio* (δια-σπάω), *dimidius* (δια-μέσος, ἥμισυ), &c. The form in *s* is preserved in Greek, but only in one sense, that of separation, weakness, and, consequently, in general opposition to that which is good. In this sense the connecting vowel is *υ* in Greek, though in Latin the form is generally not altered in consequence of this signification. In Gothic *tus* is used in this sense (Grimm, II. p. 768); this is because *tvis* is the form of δῖς in that language. In *Galat.* v. 20, διχοστασίαι is translated *tvis-stasseis*. The extensive use of the preposition or second numeral, call it which you will, in this sense cannot be better shown than by comparing *δυσ-μενής* with the Sanscrit *dur-manas* (comp. *dir-imo*) and Persian *dush-men*, which have the same signification. In Latin we have *dif-ficilis* (δυσ-χερής), *dif-famo* (δυσ-φημέω), &c.; and the same prefix appears in French words like *dés-astre*, "evil-stars," *dés-ordre*, "dis-order," *dés-accord*, "violation of harmony," &c. There is one case in which *dés* has sprung directly from the Greek *δυσ-*; for *Des-demonia* is merely the Italian form of *Δυσ-δαίμονα*, the accusative of the name given to this *unfortunate* heroine in the original Cyprian story from which Cynthio borrowed his novel. The accusative form is of course the usual one in Italian. So Shakspeare's *Cressida* is merely Homer's Chryseis, represented, however, as the daughter of Calchas, and not of an Asiatic priest of Apollo. Sometimes, as in *bis*, the labial only is represented, as *ve-cors*, *ve-sanus*, unless we prefer to consider these words as representing the element *va*, in *a-va*, "out of," which seems at any rate to be contained in *ve-stibulum* (see Becker, *Gallus*, Eng. Tr. p. 189). Under the form ζα we have *διά* in an intensive sense, for the same reason that *περί*, *per*, bears that meaning also. Thus *ζάχρυσος* = *διάχρυσος*. It is a strong proof of the connexion of this ζα with *διά*, δῖς, δύς, that ζα-μενής is generally used as a direct synonym for *δυσ-μενής*. Compare also *δίαι-τα* with

vi-ta, on the one hand, and *ζωή* on the other. So too we have *ξενῶς*, *jugum* (*diugum*), *Ζεύς* (gen. *Διός*), *Ju-piter* (*Diu-pater*), &c. The dental alone is retained in some words, as in *διά-σκιος* = *ζα-σκιος* (*διάσκιος*), and *διά* itself is used in this sense uncompounded with any word; see *Iliad* xii. 104: *ὁ δ' ἔπρεπε καὶ διὰ πάντων*. In Sanscrit this preposition also assumes the form *vi-*, like the Latin *bis*, *ve*, as well in the more original signification of disjunction or separation (thus *vi-yóktun*, *disjungere*), as with this intensive meaning (thus *vi-mahat*, “very great”).

181 The preposition *σύν*, *ξύν*, always signifying “in conjunction with,” does not require much discussion. There can be no question about the connexion of its first two letters with the Sanscrit preposition *sa-m*, and consequently with the pronominal stem *sa* (Grimm, II. p. 1018). We have the former in *μοῦ*, *ἅμα*, *simi-lis*: we have the latter in *σα-φής*, from *σα* and *φῶς* (compare *εὐγενής* from *γένος*, *ἁ-σθενής* from *σθένος*) (Bopp, *über den Einfluss der Pronomina*, p. 10); and we have the same prefix represented by a simple *ἁ* in *ἁ-κοιτις* and *ἁ-λοχος*, “a sharer of the same bed;” *ἁ-κόλουθος*, “a sharer of the same way” (*κέλευθος*); *ἁ-γάλακτες*, “sharers in the same milk” (*οἱ ἀδελφοί οἰοῦντο ὁμογάλακτές τινες ὄντες*, Orion, *Etym. M.* 5, 42); *ἁ-δελφός* (or more correctly in the epic *ἁ-δελφεός* or *ἁ-δελφεῖός*) “sprung from the same womb (*δελφύς*);” compare the Sanscrit *sô-daras* = *sa-udaras*; *ἁ-νέψιος*, “a first cousin, i. e. one with whom we are grandsons (*νέποδες*) together” (Max Müller, *Oxf. Essays*, 1851, p. 21); *ἁ-έλιοι*, “brothers in law” (*οἱ ἀδελφᾶς γυναικας ἔχοντες*, Hesych.), connected with the Sanscrit *syâlá*, “a wife’s sister,” for “having married sisters they would have their *syâlis* in common” (Max Müller, *l. c.*); *ἁ-πατουρία*, “the festival of the paternal unions,” i. e. of those who have the same *πατέρες* (C. O. Müller, *Dorians*, I. 5 § 5, note); *ἁ-πτερος*, “equally winged” (*ἰσόπτερος*, Hesych.), whence *ἔπτερος φάτις*, “a fleeting rumour” (*Æsch. Ag.* 267); *ἁ-οζος*, “belonging to the same stem” (below, § 267; *ἁτάλαντος*, “of equal weight,” &c. The identity of the prefix *ἁ-* or *ἁ-* and the fuller form *ἅμα-* is shown by the fact that nymphs of trees were called not only *Hamadryades*, but also *Adryades* or *Hadryades* (see the commentators on Propertius, I. 20, 12). The Latin *cu-m* is of course connected with *ξύν* = *κύν*, as *κοινός* is with *ξυνός*, and the Gothic *ga* is another form of the Sanscrit *sa* (Grimm, II. p. 751). The *u* in *συ-ν*, *cu-m* is a remnant of the original labial in the element *φα*, *σφα*.

We must not identify the final *-ν* of *σύν* with the *m* of *cu-m*, *sa-ma*, *म*, *ὁ-μοῦ*, *ἅ-μα*, &c.; nor must we forget the distinction between *σύν* and *μετά*. The Sanscrit *sa-ma* is obviously a compound

of two pronominal roots, the one belonging to the second element, the other to the first. Consequently, while the full force of the two elements was perceptible the word expressed a conjunction of the *near* with the *here*; and this was the simplest form in which the mind of man could conceive an union. Just so *με-τά* was a compound of the first and third pronominal roots, that of the first person being, however, put foremost; thus, although the idea of an union in general was still conveyed by the word, this idea was combined with that of a motion from the *here* to the *there*, and it is in this sense that *μετά* signifies "after," when joined with the accusative, the case of motion. But, even with the accusative, the idea of companionship or continuity is retained. Thus we have *μεθ' ἡμέραν*, "in the day-time" (Eurip. *Orest.* 58), *μετὰ νυκτός*, "in the night" (Pind. *Nem.* vi. 12). The Homeric *μέ-σφα*, a synonym for *μέχρι*, is used with the genitive in the sense of "until" (*Iliad* viii. 508). This word is a compound of the first and second pronominal roots, just as *με-τά* is of the first and third. It has no affinity with *μέχρι*, which is connected with *μακρός*, as *ἄχρι* is with *ἀκρός*. *Μετά* is found as *mit* in German, by a mutilation not unlike that of *cum* from *sa-ma*. On the other hand, *σύν*=*Φα-ν* is merely a combination of the second element with the third under that form of the latter, which is used as the expression of the mere locative. So that it approximates in meaning to *ἐν*, with which it is ultimately identical. This is consistent with the distinction which we have elsewhere laid down (on *Soph. Antig.* 115, 6) between *σύν* and *μετά*; namely, *σύν* denotes *conjunction* or *union on the same spot*; whereas *μετά* implies *companionship* or *juxtaposition*. In other words, *ξύν* is used when we wish to express that completeness of conjunction which enables us to regard the combined elements as forming one whole, whereas *μετά* always implies that the combination is separable. And here the Greek is much more distinct than the Latin, which has only one preposition *cum* to express *ξύν*, *μετά*, and *πρός*. Thus in Thucyd. i. 18, we have *ξύμμαχοι* and *οἱ ξυμπολεμήσαντες* to express a regular confederacy; but the writer says: *ἐπολέμησαν μετὰ τῶν ξυμμάχων πρὸς ἀλλήλους*, "they fought against (*with*) one another in conjunction *with* their respective allies," though a Roman would say: "pugnabant *cum* hostibus."

182 The preposition *κα-τά* is a form perfectly analogous to *μετά*. The first part, however, is itself the compound form *κεν* (above, § 114); and as *κεῖνος*=*κένιος* is ultimately identical with *ἄλλος*=*ἄνιος*, *κα-τα*=*κεν-τά* must be ultimately the same word as *ἄν-τα*, "opposite to." And this is really the case. If we examine all the uses of *κατά* we shall see that they resolve themselves into an expression of parallelism

and correspondence, such as would be suggested by the juxtaposition of two objects, placing them on the same level, in the same line, face to face. Such, for example, is the use of *κατά* in those phrases, to which Bopp has called attention in his vague and confused remarks on this Greek preposition (*über den Einfluss der Pronomina auf die Wortbildung*, p. 5). For *οὐ κατὰ Μιθραδάτην* means "not according to the standard of Mithradates," and *μείζων ἢ κατ' ἄνθρωπον* signifies "greater than in accordance with the standard of a man." Cf. Hom. *Il.* xxiv. 630: *θεοῖσι γὰρ ἄντα ἔφκει*. That this usage really springs from the sense of juxtaposition and contrast contained in *κατά* is clear from those passages in which *κατά* is really a synonym of its congener *ἄντα*, and signifies "in front of," "opposite to," *e regione*. Thus in Herodotus, viii. 85, we have *κατὰ Ἀθημαίους ἐτεράχато Φοίνικες*; and in ix. 31, *κατὰ Λακεδαιμονίους ἔστησε Πέροας* is explained by the immediately following words: *ὅτι μὲν ἦν αὐτοῦ δυνατώτατον ἀπολέξας ἔστησε ἀντίον Λακεδαιμονίων*. And similarly in a geographical description, Herod. ii. 75: *ἔστι χῶρος τῆς Ἀραβίης κατὰ Βουτοῦν πόλιν μάλιστα κη κείμενος*, "there is a place in Arabia almost exactly opposite the city of Buto." And this city itself is described (ii. 155) as *κατὰ τὸ Σεβεννυτικὸν καλούμενον στόμα τοῦ Νείλου*, "over against the Sebennyitic mouth of the Nile," i. e. on the other side of the *Buticus lacus*. Cf. Hom. *Il.* ii. 626: *αἱ ναίουσι πέρην ἁλός, Ἥλιδος ἄντα*, "the islands which lie across the sea, over against Elis."

183 In order to understand properly the various uses of *κατά*, thus identified with *ἄντα*, we must consider it in immediate connexion with *ἀνά*, which is found as its correlative or counterpart in almost every one of its significations. Thus, if we have *κατὰ τὸν πόλεμον* (Herod. vii. 137), we have also *ἀνὰ τὸν πόλεμον τοῦτον* (Herod. viii. 123) with but a slight difference of meaning: we have both *ἀνὰ στρατόν* (Eurip. *Phæniss.* 1309), and *κατὰ στρατόν* (*Iliad* vii. 370): and both *ἀνά* and *κατά* are used with numerals to give them a distributive signification. As counterparts, *ἀνά*, *ἄνω* are used to signify "up," "motion up;" *κατά*, *κάτω*, "down," "motion down."

If we examine *ἀ-νά* more minutely, and compare it with *κατά*, we shall arrive at a satisfactory explanation of their correlative use. We have already remarked that the ultimate pronominal form *ἀ-* must be referred either to the second element *Ἔα* or to the third *να*. When therefore it is prefixed to this latter element, as in the prepositions *ἀ-νά*, *εἰς* = *ἐ-νς*, and *ἐν*, it seems probable at first sight that it represents the other element *Ἔα*; for a compound particle, indicating a relation between two positions, could hardly be made up of a reduplication of the same element. But, in addition to this *a priori* con-

sideration, a comparison of *ἔνα* and the Sanscrit *ê-na=ai-na=ya-na*, furnished a strong presumption in favour of the opinion that in the case of *ἐν* and *εἰς=ἐνς* the initial element is a mutilated remnant of the second pronoun *Ἐα*; and when we discover that *ἄ-να-ξ*, which, as we shall see afterwards, is derivable from *ἄ-νά*, was *Ἐά-ναξ* in Homer's time, and that in all probability it contains the same elements as the Hebrew *'ha-nô-kî*, which with the exception of the reduplicative first syllable corresponds to its synonym *ἐ-γώ-νῃ*, we have as much evidence as we can expect in this ultimate refinement of etymological analysis, to convince us that the full form of *ἄ-νά* was a compound of *Ἐα* and *να*. Considered under this point of view, there ought to be no difference of meaning between *ἐ-ν*, *σύ-ν*, and *ἄ-νά*, which are equally compounded of the second and third elements; and, in point of fact, there are many correspondences in the use of these prepositions. As far as *ἐν* and *ἀνά* are concerned they do not differ in signification otherwise than *in* and *on*, their English equivalents. For the same reason there ought to be an identity of meaning between *ἀνά* and the first syllable of *κατά*, namely, *κα=κεν*, and there really is this equivalence in the particles *ἔν* and *κεν*. It must therefore be the termination *-τα* which constitutes the difference between *ἀνά* and *κατά*, and a little consideration will show that the affix operates in the same way and with the same results as the *ο* which distinguishes *ὑπέο* from *ὑπό* (§ 179). For if *ἀνά* means "up," but *κατά*, "down;" if *ἀνά* means "backward," but *κατά*, like *ἔντα*, "in front," the subject must be regarded as a point in the middle of a line, whether vertical or horizontal, of which one extremity is indicated by *ἀνά* and the other by *κατά*. The termination of *κα-τά* and *ἔν-τα* must, like that of *εἰ-τα*, *ἐπ-ει-τα*, *ἐνθαυ-τα*, &c., be a corruption of *-τεν=θεν*; compare *ἔπει-τεν*, *ἐντεῦ-θεν*; and this termination is generally ablative, i.e. it denotes separation or motion from a place; so that the relation between *κα-τά=κεν-θέν* and *ἀνά=Ἐανά=κεν* is much the same as that between *super*, *sub-ter*, *sub*, *ὑπέο*, *ὑπό*. And we have a further analogy in *ἄ-τεο*, *ἔν-τεο*, Lat. *inter*, Sanscr. *antar*, Germ. *unter*, which in some of their applications give the sense opposed to *ἀνά*, "up," namely, "down," "between two points on the surface," "out of the way," and generally "separate," "apart" (below, § 204). That the antithesis of "backwards" and "forwards," "above" and "below," may coincide with that of "far" and "near," is shown by our common language; for we say "*here* in front of us," but "*behind there*," and "*up there*," but "*down here*."

184 The preposition *ἀνά* occurs, either separately or as a prefix, in almost every language of the Indo-Germanic family, and there are

few words which have more varied functions to perform. It is found even in the Semitic languages; for the negative אֵין and the prohibitive אַל are clearly connected with the prepositions אֵל, אֶל = *ên, in* (see *Maskil le Sopher*, p. 15)*. In Greek this particle appears not only as the dissyllable *ἀνά*, but also under the monosyllabic forms *να* or *νη*, and *ἀν-*, and even without the characteristic nasal as the prefix *ἀ-* or *ἐ*. Similarly the Sanscrit *ana* is reduced occasionally to the initial *a*, and *na* occurs separately in Pâli, though it is used only as a termination in Sanscrit and Zend (Bopp, *Vergl. Gramm.* p. 531). This latter element stands independently in Latin, in the words *nam*, (Bopp, *Vergl. Gramm.* p. 534), *num*, *nun-c*, *ně*, *nē*, *nǐ*, *nī*, *non*; in Greek, in the words *νν*, *νῦν* (compare *σύν-ν*, *sa-m*), *ναί*, *νή*, *νη*, &c. In Sanscrit the full form *a-na* is used as a negative prefix: thus *anapa-kâra*, "harmlessness," "freedom from hatred and malice," is compounded of *ana* and *apakâra*, "evil doing." It is both in this sense, and as an augment indicating past time, that it is shortened into *a*. The same is the case with the Greek *ἀνά*. We have both *ἀν-* and *να* or *νη* as negative prefixes; we have *ἀνά* so used as a prefix, and separately, in the form *ἀνεύ*, with a very similar signification; we have *ἀ* for *ἀν* as a negative prefix†, and we have *ἐ-* for *ἀνά* as the verbal augment. That *να* is not a mere abbreviation of *ἀνά*, like the modern Greek *δέν* for *οὐδέν*, appears from the fact, that *ἀν-* is found with the same privative meaning as *να* and *ἀνά*; and in the Greek *ἀπό* (*ἀψ*), *ἄ-τερ* (a comparative form), &c., as well as in the Sanscrit *a-pa* and *a-va*, we have *a* for *na*. In a different application of the same pronominal combination we have seen above that the Hebrew *'ha-ni*, when used as a verbal prefix, is shortened into *'hē*, and that *'henesh* becomes *'hish*. With regard to *-να* we must remark that the primitive meaning of this stem is sufficient to account for its negative use, without assuming that when so used it is merely an abridgment of *ἀνά*. We have before pointed out the idea of separation, removal, distance, conveyed by the words *νν*, *νόσφι*, *νόστος*, &c.; this power

* It is to be remarked that אֵל bears the same relation to *ἀνά*, "up," that אֶל does to *super*, *ὐπέρ*, *über*, *ufar*, "over," and thus completes the chain of analogies between the Greek and Hebrew particles involving אֵל and *ν*.

† On the supposition that the first syllable of *ἀνά* is the element of *α*, it is obvious that the negative prefix cannot be this syllable only: it must be a remnant either of *ἀνά* the fuller form, or of *να*, the *ν* having evanesced according to the general principle. We prefer the former alternative, and the same may have been the view of Lepsius when he proposed the following thesis: "particulam privativam apud Græcos a principio unam *ἀν* fuisse; ceteras, quæ reperiuntur, formas secundum euphoniæ leges inde natas esse" (*de Tabulis Eugubinis*, ad calc.).

of the element *-na* is so forcible, that when appended to the element *ka*, which is the strongest expression of proximity, it converts it into a pronoun (*κεῖ-νος*), denoting distance in a very marked manner. It is to this same idea of distance that we owe the meaning of negation contained in *να*; for after all, what is a negation but an expression of farness or removal? and what way of negating have we in our own language more decided than the common "far from it"?

It is on this account that we also find *ἀπό* and *apa*=*na-pa* with a negative meaning both in Greek and Sanscrit. Thus the word *apa-kâra*, mentioned above, which is composed of *apa*, "from," and *kr̥*, "to make," signifies "evil-doing," "injury," in perfect analogy with the Greek: οὐδὲν ἄπο τοῦ ἀνθρώπου τρόπου πεποιήκαμεν (Thucyd. i. 76). It is this use of *ἀπό* which has given occasion to the employment of *ἀποκαλέω* in a bad sense: thus Soph. *Aj.* 727: τὸν τοῦ μανέντος κἀπιβουλευτοῦ στρατοῦ ξύναιμον ἀποκαλοῦντες, "calling him by way of abuse." Aristoph. *Aves*, 1263: ἀποκεκλήκαμεν διογενεῖς θεούς (unless we ought to read ἀποκελήκαμεν). Xenoph. *Mem.* i. 2, § 6: τοὺς δὲ λαμβάνοντας τῆς ὁμιλίας μισθὸν ἀνδραποδιστὰς ἑαυτῶν ἀπεκάλει. i. 2, § 57: ἀργοὺς ἀπεκάλει. i. 6, § 13: σοφιστὰς ὥσπερ πόρνοὺς ἀποκαλοῦσιν. Plato, *Gorg.* p. 512 c: ὡς ἐν ὀνειδεί ἀποκαλέσας ἂν μηχανοποιόν. Andoc. c. *Alcib.* 31, 10: ἄλλους ὀλιγαρχικούς—ἀποκαλεῖ. Eurip. *Iph. A.* 1354: οἳ με τῶν γάμων ἀπεκάλουν ἥσσανα. Plut. *Moral.* p. 204 f: ἀναισθητοὺς καὶ βαρβάρους ἀπεκάλει. *Theætet.* p. 168 d: χαριεντισμὸν τινα ἀποκαλῶν, which Schleiermacher properly translates "nannte er nicht dies einen schlechten Scherz;" Demosth. *Fals. Leg.* 47: λογογράφους τοίνυν καὶ σοφιστὰς ἀποκαλῶν. Aristides, *Tom.* ii. p. 383: ἀποκαλεῖν ἀλλάζονα (see also Stallbaum on Plato, *Gorg.* u. s.). The meaning "up," with which *ἀνά* is so often found, is only another modification of the same idea, for highness and farness are related notions. This is shown by the word *ἀνεκός*, which, we conceive, is a compound of *ἀνά* and *ἐκός*, although Döderlein supposes that it is formed from *ἀνά*, as *περίξ* is from *περί*, and that it is related to *ἐκός* in sound only (*De ἄλφα intensivo*, p. 12). Böckh has endeavoured to show (*Notæ Crit. in Pind. Olymp.* ii. 23) that *ἀνεκός* always means "upwards." Plutarch says that the Attics used *ἀνεκός* for *ἄνω*, and *ἀνέκαθεν* for *ἄνωθεν* (*in vita Thesei*, cxxxiii). The grammarians allege that *ἀνέκαθεν* can only be used ἐπὶ τόπου, but that *ἄνωθεν* may be used ἐπὶ χρόνου, and this is partly true (see Phrynichus, p. 270 Lob.; Thomas M. p. 77; Bachmann, *Anecd.* Vol. ii. p. 393). One would think that there must be some distinction between *ἄνωθεν* and *ἀνέκαθεν*, and that the latter was the stronger of the two, from their use in Æschylus, *Choëph.* 421, though Lobeck (*ad Soph. Aj.* 145, p. 148) looks upon this as one of many instances of a mere redundancy of

expression: "neque negari potest," he remarks, "de vocabulis idem valere, quod de foliis dici solet, nullum unum alteri perfecte simile esse, sed hæc discrimina plerumque delitescunt." The Scholiast on Aristophanes (*Vesp.* 18) says: ἀνεκὰς δὲ ἀντὶ τοῦ ἄνω, πᾶν ἐκὰς καὶ εἰς ὕψος, which we believe to be a correct statement; the word implies both height and distance, as in the line of Pherecrates emended by Valckenaer (*Diatrib. in Eurip.* p. 285): τοῦτ' ἵ ἐστιν; ὥς ἀνεκὰς τὸ κρεῖβανον: and this is also implied in the passage of Pindar on which Böchh is commenting: ὅταν θεοῦ μοῖρα πέμπη ἀνεκὰς ὄλβον ὑψηλόν, i. e. πέμπη ἀνεκὰς ὥστε ὑψηλὸν εἶναι.

As ἀνά is used negatively, so is κατὰ used affirmatively. But in this case, at least in composition, the opposite of κατὰ is often ἀπό: thus, κατὰ-φημι, "to say yes," ἀπό-φημι, "to say no." As opposed to κατα-νεύω, "to express assent by nodding," we have both ἀπο-νεύω and ἀνα-νεύω with the contrary signification. The simple ἀ- was also a direct opposition to κατὰ, as Thucydides plainly announces (1.123): οὐ γὰρ δὴ πεφηνγότες ταῦτα ἐπὶ τὴν πλεῖστους δὴ βλάβασαν καταφρόνησιν κευωρήκατε, ἢ ἐκ τοῦ πολλοὺς σφάλλιν το ἐνάντιον ὄνομα ἀφροσύνη μετωνόμασται.

185 That ἀ-νά is used not only in a negative or privative sense, but also with an intensive meaning, has been asserted by the old grammarians, but the instances adduced have been doubtfully received by modern philologists; and in some cases, when this prefix appears in its shortest form ἀ-, it cannot be determined whether it is a relic of ἀνά, or a representative of ἄ=σα (above, § 181). The words, which are supposed to commence with the intensive ἀνά, have been examined by Döderlein in a special treatise (*Commentatio de ἄλφα intensivo sermonis Græci.* Erlang. 1830). The following, commencing with ἀ-, seem to be intensive and yet not collective; namely, ἀ-τένης, "excessively stretched, obstinate, stubborn;" ἀ-χανής, "widely opened, extremely gaping;" ἀ-σπερχές, "very eagerly;" ἀ-σκελές and ἀ-σκελέως, "exceedingly hard;" ἀ-κήδεια, "very great sorrow" (Buttmann, *Ausf. Sprl.* II. p. 358); and that these may presume the prefix ἀνά is clear from the words which have the prefix νη- with an intensive signification: such are νηγάτεος (ἀγαθός), νήδυμος (ἡδύς), νηλιτής (ἑλιτής), νηπεδανός (ἡπεδανός), νητρεκῶς (ἀτρεκῶς), νήχυτος (πολύχυτος), νωλεμές (εἰλεῖν, comp. οὐλαμός, Döderlein, *de ἄλφα intensivo*, pp. 21 foll.). We do not refer νήριτος to this class. It seems to us rather to be connected with the root of νηρεύς, &c., and thus the νήριτος ὕλη of Hesiod (*Op. et D.* 511) will imply a floating fluctuating mass of foliage (above, p. 160, note). Supposing, however, that the intensive ἀ- and νη- belong to the same pronominal element as the negative prefix of the same

form, it becomes necessary to inquire how the same form could have borne meanings so opposite.

Döderlein attempts to reconcile the negative and intensive uses of $\acute{\alpha}$ as follows (*de ἄλφα intensivo*, p. 24): "I consider that by a sort of abuse the proper force of α privative has been turned into an expression of *excess* (*nimietas*); just as in those words in which α is put for $\delta\upsilon\varsigma$; for the *depravation* of a thing is nearly the same as its *defect*, and *excess* is nearly the same as *depravation*. Thus, among the Greeks, $\acute{\alpha}\pi\acute{\alpha}\lambda\alpha\mu\omicron\varsigma$ is, in Homer, he who is *without* skill, in Pindar, he who makes a *bad use* of his skill; and in German, *Unlust* is used in a privative sense, *Unstern* in a depravative sense, and *Unstier* in an exaggerative and intensive sense. If *greatness* lies between *immensity* and *littleness*, immense and little things are alike excluded from the category of greatness." Pott (*Etymol. Forsch.* zweite Auflage, I. Theil. p. 387) explains the negative prefix with an intensive signification in such words as *Unzahl*, "an enormous number;" *ungross*, "very great;" *Unkuh*, "a great cow," &c., by the conception of a magnitude without comparison or proportion. In our opinion the negative and intensive significations of $\acute{\alpha}$ - are alike due to the notion of "farness," which we have pointed out as the primary one of $\acute{\alpha}$ - $\nu\acute{\alpha}$, $\nu\alpha$ -, and $\acute{\alpha}$ -; for distance suggests magnitude or extent quite as much as separation and incompatibility; and we shall see, in the following chapter, that in the form $\nu\acute{\alpha}\iota$ or $\nu\acute{\eta}$ this negative prefix appears as a most emphatic affirmation. With regard to Döderlein's supposed connexion between "excess" and "depravity," it cannot be doubted that $\mu\acute{\alpha}\lambda\alpha$ and $\mu\acute{\omicron}\lambda\omicron\varsigma$ are connected with *mālus*, and that $\mu\acute{\omicron}\lambda\omicron\varsigma$ and $\mu\acute{\omicron}\chi\theta\omicron\varsigma$ spring from the same origin as $\mu\acute{\epsilon}\gamma\alpha\varsigma$. So, too, we understand Virgil's *iniquo pondere rastri* as referring only to excessive weight; and *in-gens* = $\acute{\iota}\pi\epsilon\omicron\upsilon\phi\upsilon\acute{\eta}\varsigma$, means "over-grown," *i. e.* of excessive magnitude.

186 But by far the most important of the correlative uses of $\acute{\alpha}\nu\acute{\alpha}$ and $\kappa\alpha\tau\acute{\alpha}$ is their appearance in an abridged form as $\acute{\alpha}\nu$ and $\kappa\acute{\epsilon}\nu$, with much the same functions to perform. That the $\acute{\alpha}\nu$, which is found in conjunction with verbs, expressing the apodosis of a condition, is in reality the preposition $\acute{\alpha}\nu\acute{\alpha}$, appears clearly enough from the use of that preposition in the old poets under the same shortened form (Böckh, *Not. Critt. in Pind.* p. 387). It is also sufficiently obvious from the use of the prepositions, $\acute{\alpha}\nu$ - $\tau\acute{\iota}$, which bears the same relation to $\acute{\alpha}\nu\acute{\alpha}$ that $\pi\rho\omicron$ - $\tau\acute{\iota}$ does to $\pi\rho\acute{\omicron}$, and $\acute{\alpha}\mu$ - $\phi\acute{\iota}$, which stands for $\acute{\alpha}\nu\alpha\phi\acute{\iota}$, as $\acute{\alpha}\mu\phi\omega$ does for $\acute{\alpha}\nu\alpha\phi\omega$ = $\acute{\alpha}\nu\alpha$ - $\delta\epsilon\omega$. It is altogether a matter of indifference whether we regard $\acute{\alpha}$ - ν as the locative of the mutilated pronoun $\acute{\alpha}$, or consider the ν as part of the suffix $-\nu\alpha$, for the ν of the locative is simply this suffix in a mutilated state.

The identity of the preposition *ἀ-νά* and the particle *ἄν* was recognised many years ago by Hermann, who, in his laborious treatise on the particle *ἄν* (*Opuscul.* Vol. iv. p. 6), explains the use of the particle from the sense of *secundum*, "according to," in which *ἀνά* is found; thus, he says, *ἐβουλόμην ἄν εἰ ἐδυνάμην* is equivalent to *ἐβουλόμην ἀνὰ τοῦτο εἰ ἐδυνάμην*. He also connects *κεν* with *καί*, on the ground that *ὅς κε θεοῖς ἐπεπεῖθηται* is equivalent to *ὅς καὶ θεοῖς ἐπεπεῖθηται*. With regard to the meaning of the particles *ἄν* and *κέν*, he thinks that these two words, like *ἴσως*, *πού*, and *τέ*, are only so many modifications of the idea of probability. This explanation is quite insufficient, but Hermann is undoubtedly right in comparing *ἄν* with *ἀνά*. That *κέν* also is connected with *κατά*, and that the first syllable *κα* was actually used by the older Greeks instead of the more lengthened form in which the preposition appears in the classical authors, was first suggested by Adolfs Weber, Professor of Mathematics in the Gymnasium at Torgau, who has shown that *κατά* is shortened into *κά*, not into *κάτ*, and that *κάτ* has arisen more from usage than from the nature of the case. Welcker, in his notice of Weber's pamphlet (*Rheinisches Museum* for 1835, p. 638), has given an instance of the use of *κά* for *κατά* from an inscription of the 69th Olympiad (in Chishull, *Antiq. Asiat.* p. 49), where we have *EZHTHΣE TΑΣ ΠΟΛΕΙΣ TΑΣ ΚΑ ΤΗΝ ΣΕΛΕΥΚΙΑΑ*. Weber therefore infers the derivation of *ἄν* and *κά* (*κέ*), from *ἀνά, κατά**, and we agree with him in thinking that *ἀνά, κατά*, and *ἄν, κεν* are cognate and parallel correlatives. We believe, however, that *κα=κεν* is not apocopated from *κατά*, but that the latter is a subsequent and lengthened form, bearing the same relation to *κα=κεν* that *ἄν-τα* does to *ἄν*. For if *κα* had not resulted from the independent *κεν* (according to the principle often referred to), the longer form would have retained the *ε*, as in *με-τά, εἰ-τα, κῆ-νος, κῆ-δι*, &c.

It is in accordance with all that we know of the origin of prepositions, to suppose that they would naturally and necessarily be used by themselves as cases of pronouns before they were employed as supplements to the cases of nouns, when those cases had, by the mutilation of their endings, lost their original significance. We observe remains of this use not only in classical Greek, but even in

* *De κατά Præpositionis Apocope, scr. Ad. Weber, Gymnasii Torgovani Sub-conrector et Disciplinæ Mathem. ac Physicæ Doctor.* 1835. Since the publication of the first edition we have succeeded in obtaining a copy of this valuable little essay, with the following notice respecting the author from Dr. G. W. Müller, the Rector of the Torgau Gymnasium: "Obiit Suerini a. d. IV. Jan. anno p. Chr. 1842. G. W. M." The real effect of Weber's argument, although it does not seem to have occurred to himself, is to prove the independent existence of *κα=κεν* as a preposition equivalent to its offspring *κα-τά*.

modern French and Italian. In the former we find almost all the prepositions used in their primary sense as adverbs of place: thus we have *ἐν*, "at the same time" (Sophocl. *Œd. Tyr.* 27, quoted above, § 170); *ἐπι*, "in addition" (*Œd. Tyr.* 183: *ἐν δ' ἄλοχοι, πολιαί τ' ἐπιματέρες*. *Antig.* 789: *καί σ' οὐτ' ἀθανάτων φύξιμος οὐδεὶς, οὐδ' ἁμερίων ἐπ' ἀνθρώπων*; see however, Matth. *Gr. Gr.* § 584 η); *πρός*, "in addition" (Plato, *Resp.* p. 466 ε: *καὶ πρὸς γε ἄξουσιν*, Demosth. *Philipp.* i. p. 47: *τάλαντα ἐνενήκοντα καὶ μικρόν τι πρὸς*): or even two at once in Homer, as in *Iliad* v. 66: *ἡ δὲ διὰ πρὸ ἀντικρὺ κατὰ κύστιν ὑπ' ὅστεον ἦλνθ' ἀκωκή*. That *κα-τά* and *ἀ-νά* are also used in this way is well known: thus we have in Herodotus (i. 208): *ἡ μὲν δὴ ἐξαναχώρεε, κατὰ ὑπέσχετο πρῶτα*, and (iii. 86): *οἱ ἔξ, κατὰ συνεθήσαντο, παρήσαν ἐπὶ τῶν ἵππων*:—and in Homer (*Iliad* xviii. 562): *μέλανες δ' ἄνα βότρυες ἤσαν*. In Italian and French the prepositions *ne* and *en*, both signifying "in," are used as general adverbs of relation with the meaning "of this," "from this," "with regard to this." It is generally supposed that these particles are derived from *inde*, as *y* is from *ibi* (Grimm, *D. Gr.* iii. p. 746; Raynouard, *Gr. d. l. langue Rom.* pp. 86, 268), and there is no doubt that this was the origin of their use; but the forms themselves show that these adverbs were eventually superseded by the preposition included in the Latin *in-de*.

The use of *ἔν* and *κέν*, like that of all the other particles in Greek, is a proof of the early tendency and striving of that language after clearness of logical expression. It is true that the moods of verbs, as well as the cases of nouns, are capable of expressing, without any outward helps, all the necessary modifications of meaning. But they cannot always do this with logical distinctness, even when they retain the full force of their inflexions; and when, in process of time, the ending is overbalanced by the body of the word, or sacrificed to the laws of euphony, it becomes impossible to express the different local relations or cases of nouns without prepositions, and the different modal relations of verbs without particles, to designate the dependence or subsequence of the secondary sentences. One of the great beauties of the Greek language, as it stands, is its frequent use of particles or pronominal words for this purpose, but no one of these particles is employed with more efficacy than those two fragmentary prepositions of which we are now speaking. The older Greek writers used both *ἔν* and *κέν* to express the apodosis of an hypothesis or condition: the later authors employed only the former. According to what we have stated above (§ 166), *κέν* would, if not an enclitic, have precisely the same meaning as *ἀ-νά*, "in that." As, however, *κέν* is but a dependent word, it stands on the same footing as *τε* and *τι*, *πou* and *πως*, which are all etymologically connected with it, and signifies "in some place

or other," "in any way," and, by implication, "perhaps." In fact, *κέν* bears the same relation to *τις*=*τιν-ς* that *ἀνά*=*ἑκάνά* does to *καῖνος* (§ 149). If *τε* is an enclitic form of *καί*, the relation between them is altogether the same as that which subsists between *κέν* and *ἄν*. Indeed there is a much closer connexion than is generally supposed between the copulative sentence and the hypothetical proposition. In either case we have a relative with an indefinite antecedent. Thus in *ἄνδρες τε καὶ ἵπποι*, "where horses, there men," *τε* is an indefinite antecedent to the relative *καί*; and in *εἴ τις ταῦτα δοῖν, ἀγαθὸς ἂν εἴη*, "as often as any one did these things, he would so often be a good man," the particle *ἄν* is the indefinite antecedent to the relative *εἴ* (see *Gr. Gr. Art.* 397, and elsewhere). The particles *הֵנָּה* and *ו*, which are both of a demonstrative nature, the latter being in fact a residuum of *הֵנָּה*, are similarly used in the apodosis as the antecedents of *כִּי*, which is clearly connected with the roots *כֵּן*, *כֵּן*, *cum*, *אִמָּא*, &c. (see *Maskil le Sopher*, pp. 14, 30). In Sanscrit the intimate connexion between the hypothetical and relative sentences is shown not only by the obviously relative origin of *yadi*, but also by the occasional parallelism of the relative and *chêt*="if:" thus in the *Hitôpadêça*, çl. 29, we find: "*yad abhâvi, na tad bhâvi; bhâvi chên na tad anyathâ*," i. e. "*what will not be, that will not be; if it will be, this [is] not otherwise*." When we find *τε* in the first sentence, and *καί* in the latter, which is the common construction, the meaning conveyed is, that what is affirmed generally (*τε*="in any way") of the former, is affirmed in the same way of the latter (*καί*="in this"). When *τε* appears in both sentences, the meaning is, that what is affirmed in *any* way of one is predicated in *some* way of the other. Similarly, we should expect (1) that *κε* would appear in the hypothesis and *ἄν* in the apodosis, with this meaning — if such were "in any way" (*κε*) the case, then "in that case" or "farther" (*ἀνά*, *ἄν*) such things would follow: or (2) that *κέν* would appear in both, with this sense — if such were "in any way" the case, then "in some way" such things would ensue. We frequently find both of these constructions in the epic and lyric poets, as in the following examples; (1) Homer, *Odyss.* viii. 353: *πῶς ἂν ἐγὼ σε δέοιμι μετ' ἀθανάτοισι θεοῖσιν, εἴ κεν Ἀρης οἴχοιτο, χρεός καὶ δεσμόν ἀλύξας*; Pindar, *Nem.* ix. 34: *Χρομύρ κεν ὑπασπίζων — ἔκρινας ἂν κίνδυνον ὄξελας ἄντ' αἶς*. (2) Homer, *Iliad* vi. 50: *τῶν κέν τοι χαρίζαιτο πατήρ ἀπερείσι ἀποινα, εἴ κεν ἐμὲ ζῶν πεπύθοιτ' ἐπὶ νηυσὶν Ἀχαιῶν*. Hesiod, *apud Aristot. Eth.* v. 5: *εἴ κε πάθοι τά κ' ἐρεξε, δίκη κ' ἰδιεῖα γένοιτο*. There appears to be a particular attraction of the indefinite *κέν* into the protasis, as might be expected from the generally vague nature of hypothetical sentences. Even *ἄν* is ap-

pended to relative, or, what is the same thing, hypothetical words in the Attic dialect; thus, we constantly have *ἐάν, ὅταν, ὅς ἂν*, &c.: and *κεν* seems to have been similarly appended to the conditional particle by the Cretans, as we may infer from the gloss on *βαί-καν*=*ῥαί-καν*, in Hesychius, and from the Doric collocation *αἰ-κα*. In Homer and Pindar we often find *κε* in the hypothesis without any corresponding *κε* or *ἂν* in the apodosis. Thus in *Iliad*. xix. 321: οὐ μὲν γάρ τι κακώτερον ἄλλο πάθοιμι, οὐδ' εἴ κεν τοῦ πατρὸς ἀποφθιμένοιο πυνδοίμην. Pindar, *Pyth.* iv. 263: εἰ γάρ τις ὄξους ὀξύτομον πελέκει ξερεῖναι κεν μεγάλας δρυὸς, αἰσχύνοι δέ οἱ θνητὸν εἶδος, καὶ φθινόκαρπος ἐοῖσα διδοῖ ψᾶφον περ' αὐτᾶς,—where, however, *καί* stands as a sort of substitution for the *κεν* which might have appeared in the apodosis. The fact is, that the hypothetical particle, in its older and stronger form, is itself a relative word, as will be shown in the following chapter, and even *εἰ*, which is generally its representative, and which is more immediately connected with *ἵ*, where the idea of nearness is not so strongly expressed, may always be referred both in origin and meaning to the second pronominal element.

As there are instances in which *καί* is found in the first of two correlated sentences, and *τε* in the second, the enclitic *κεν* might occasionally be expected to appear in the second sentence in opposition to *ἂν* in the protasis: the instances of this construction must be very few; the only example, with which we are acquainted, is in Pindar, *Nem.* vii. 89: εἰ δ' αὐτὸ καὶ θεὸς ἂν ἔχοι, ἐν τίν κ' ἐθέλοι—εὐτυχῶς ναίειν. It would be better, however, to read *ἀνέχοι*, with Thiersch and Böckh, for the meaning clearly is—"if a God would condescend to, would put up with, would not disdain, the law of good neighbours," a sense which *ἀνέχω* bears in Euripides, *Hecuba*, 119: *Κασσάνδρας ἀνέχων λέκτρ' Ἀγαμέμνων*, and Sophocles, *Ajax*, 212: *ἐπεὶ σέ, λέχος δουριάλωτον, στέρεξας ἀνέχει θούριος Αἴας*.

187 One of the best proofs of the correctness of this view, with regard to the meaning of *ἂν* and *κέν*, is the place which these particles occupy in the sentence. Neither of them can appear as the first word, but they are always placed in immediate connexion with the conditional word, when they appear in the protasis, or in that part of the apodosis, in which the reference to the hypothesis is most distinct and prominent, in other words, where the antecedent would be most likely to stand. The formation of the compound conditional particles *βαίκαν, αἰκα, ἐάν, ὅταν*, &c. is a sufficient proof of the attraction of *κέν* and *ἂν* to the conditional words: the following will serve as instances of the mode of placing *ἂν* in the apodosis. When there is no reason for its appearing in other positions, *ἂν* always follows the

predicate: thus Sophocles, *Ajax*, 550: ὦ παῖ, γένοιο πατρός εὐτυχέστερος, τὰ δ' ἄλλ' ὅμοιος· καὶ γένοι' ἂν οὐ κακός. Here is a wish expressed by the first γένοιο, and the second signifies the result of a condition; in the opposition therefore of the two repeated words, the ἂν should immediately follow the second: "may you be, &c., and you will be *in that case*, &c." But in the following passage, where there is a similar opposition of the optative proper to the optative with ἂν, the antithesis is between the two negatives, not between the two verbs, and therefore the ἂν appears immediately after the direct negative οὐ, to which the indirect μή is strongly opposed; Sophocles, *Antigon.* 686: οὐτ' ἂν δυναίμην, μήτ' ἐπισταίμην λέγειν, "I should not even in this (i. e. if I knew how) be able, and I pray that I never may know how to say, &c." The negative οὐ, and the cognate particle οὖν, exercise an attraction upon ἂν in the apodosis similar to that which it experiences in the protasis from the relative and conditional words. Thus, we very often find the collocations οὐκ ἂν, οὐδ' ἂν, οὐτ' ἂν, οὐποτ' ἂν, &c., and ἂν is often drawn away from its verb by the influence of οὖν: compare Demosthen. *Olynth.* i. 13: τί οὖν ἂν τις εἰποι ταῦτα λέγεις ἡμῖν νῦν; *Olynth.* iii. 14: τί οὖν ἂν τις εἰποι σὺ γράφεις ταῦτ' εἶναι στρατιωτικά; Plato, *Sympos.* p. 202 D: τί οὖν ἂν, ἔφη, εἴη ὁ Ἔρως. The reason for this is obvious; the particle οὖν refers directly and specially to what has preceded, and the particle ἂν must of course have the same reference in questions like those which we have quoted. In general, whatever word in the apodosis is to be expressed with most emphasis in reference to the conditional sentence, whether that conditional sentence is expressed or understood, this word is followed by ἂν; Herodotus, iii. 119: πατρός δὲ καὶ μητρὸς οὐκ ἔτι μεν ζώντων, ἀδελφεὸς ἂν ἄλλος οὐδενὶ τρόπῳ γένοιτο. Thus also qualitative adverbs, like ἡδέως, εἰκότως, τάχα, μάλιστα, &c., on which the emphasis always falls, are invariably followed by ἂν, unless some other word with a stronger attractive power appears in the sentence: Plato, *Protagor.* p. 318 A: ἡδέως ἂν φησι πυνθέσθαι. As words expressing opinion about or information on a subject have all the effect of qualifying adverbs or predicative words, we find that they also attract the particle into their immediate neighbourhood; Plato, *Phædo*, p. 101 E: σὺ δ' εἶπερ εἰ τῶν φιλοσόφων οἶμαι ἂν ὥς ἐγὼ λέγω ποιοῖς. It is prefixed to the word of thinking when the emphasis falls upon a word before it, as in Plato, *Respublica*, i. p. 333 A: πρὸς γε ὑποδημάτων ἂν οἶμαι φαίης κτῆσιν, or if a relative word precedes, as in Thucydides, i. 22: ὥς δ' ἂν ἐδόκουν ἐμοί—τὰ δέοντα μάλιστα εἰπεῖν, or οὐκ, as in the same author, ii. 89: οὐκ ἂν ἡγοῦνται—ἀνθίστασθαι ἡμᾶς. If emphatic adverbs occur in the same sentence with the verb significant of opinion, the

ἄν as a particle of reference is naturally enough repeated with the different predicative words; thus in Thucyd. II. 41, we find *δοκεῖν ἄν μοι τὸν αὐτὸν ἄνδρα ἐπὶ πλείστ' ἄν εἶδη, καὶ μετὰ χαρίτων μάλιστ' ἄν εὐτραπέλως τὸ σῶμα αὐταρκὲς παρέχεσθαι*. The most curious and most instructive instance of this hyperbaton is the intrusion of *ἄν*, which belongs to an optative following, into the phrase *οὐκ οἶδ' εἰ=vereor ut*. Euripides has *οὐκ οἶδ' ἄν εἰ πείσαιμι* in two passages (*Medea*, 911, *Alcestis*, 49), but it is clear that the necessities of the metre have obliged him to misplace the particle, which certainly ought to follow the negative, as appears from Plato, *Timæus*, p. 26 B: *ἐγὼ, ἃ μὲν χθρὲς ἤκουσα, οὐκ ἄν οἶδ' εἰ δυναίμην ἅπαντα ἐν μνήμῃ πάλιν λαβεῖν*, and from the somewhat similar passages in Demosthenes, *de Fals. Legat.* p. 441, 21: *οὐδ' εἰς εὖ οἶδ' ὅτι φήσκειν*, and *Proæm.* p. 1423, 14: *οὐδὲν ἄν τὰ ὑμέτερά εὖ οἶδ' ὅτι βέλτιον σχοίη*. The *ἄν* appears unattracted in Aristoph. *Aves*, 1018: *οὐκ οἶδά γ' εἰ φθαίης ἄν*.

The particle *κέν* is distinguished from *ἄν* by its tendency to assume an early place in the sentence. It is put before many words to which *ἄν* is regularly subjoined; thus as Hermann justly remarks (*Opuscul.* IV. p. 7), if Syagrus (Herodotus, VII. 159) had not been desirous of making a line *ἧ κε μέγ' ὠμώξειεν ὁ Πελοπίδης Ἀγαμέμνων* in imitation of Homer's *ἧ κε μέγ' οἰμώξειε γέρον ἱππηλάτα Πηλεΐδης* (*Iliad* VII. 125), he would have said *ἧ μέγα ἄν ὠμώξειεν*.

CHAPTER VI.

THE NEGATIVE AND OTHER PARTICLES.

§ 188 Grimm's remarks on negative particles. 189 *Μά, μή, νή, ναι*, and *οὐ-κ*. 190 Interrogative particles, and their connexion with the negatives. 191 Particles used in answers to questions. 192 Inferential particles. 193 Other words indicating progression or continuance. 194 Copulative conjunctions sometimes due to the same connexion of thought; 195 but generally derived from the indefinite and relative pronouns. 196 Identity of *κα* and *que*. 197 Use of *τε* as an affix to relative words. 198 Different origin of *τε* and *τοι*. 199 Disjunctive particles. 200 Comparisons. 201 Distributive particles. 202 Pronominal origin of *δὴ*. Temporal particles. 203 The concessive particle *γς*. 204 *Γάρ* and *ἄρα*. 205 The hypothetical *εἰ*.

188 **I**N the last chapter we were led, by an investigation into the origin of the prepositions *ἀνά* and *κατά*, to make some remarks as well on the particles *ἄν* and *κέν*, as on the negative uses of the word *ἀ-νά*, and its abridged or mutilated forms. We shall commence our inquiries, upon the important subject of the Greek particles in general, by a reference to what we said there, as a natural introduction to the extensive question respecting the words which express interrogation, negation and inference, which, we shall find, are all connected in the Greek and cognate languages.

Grimm, at the end of the third volume of his great work, has discussed this question with that extraordinary diligence and learning which he everywhere displays. We refer our readers to what he says with the greater pleasure, as this part of his work has been rendered accessible to the English reader, and commented on, by a scholar of considerable ability (*Philol. Museum*, II. pp. 315 foll.). We shall make the German philologist's inquiries the basis of our own on the present occasion; for, although we do not think that he has seen the general principle by which all the phenomena are to be explained, and although he has in consequence fallen into some particular errors, such are his learning and indefatigable industry, that we could not hope to add much by our own researches to the vast induction of particulars which he has collected and arranged.

He commences by stating (III. p. 708) the distinction between a negation and an opposition; the latter includes the former, but not *vice versâ*. "The essence of the proper negation consists in the logical denying of a position. By the expression *not mountain*, *not*

good, the position *mountain*, *good* is excluded, but it is left indefinite, whether the opposite *valley*, *evil*, or the intermediate notion *plain*, *middling*, is to be supplied." He adds, "*All negation proceeds from the grounds of the position*, and presupposes it. The position is independent, the negation necessarily refers to a position, and cannot be expressed as anything new, but merely as a modification of the position. This modification results from an *insertion* in the positive position, which insertion in the first instance consists of the smallest possible *particle*, producing an effect both rapid and sure. By degrees, however, this negative particle is usually connected very closely with other words. Along with it we often find substantives that strengthen the sense, which can even take the negating power from it to themselves." He then divides the simple negation in the Teutonic languages into two kinds—the consonant-form and the vowel-form. The fundamental letter of the consonant-form is N. Thus, in Gothic it was *nê*, in High German *nein*=*nî-ein* (so *non*, anciently *nenum*, from *ne-unum**), and in old English *ne*. The German *nicht*, English *not*, are compounds signifying *no-thing*; compare the old High German *nêowiht*, *nîowicht*, *nieht*; middle High German *nicht*, *niht*; Anglo-Saxon *nâwiht*, *nâuh*, *nauht*; English *nought*, *not* (*Phil. Mus.* II. p. 326). Of a similar formation is the Latin *nihil*=*ne-hilum*. The English *no* is a compound of *ne* and the Anglo-Saxon *â* (Gothic *ai*, *aio*, comp. *aiFél*, *aerum*), which signifies *always*; *ev-er* contains the same element. The middle High German prefix *en-* does not we conceive arise from the old High German *n'* for *nî*, nor do we think it is analogous to the formation of *ἐποῦν*, *ἐποί*, *ἐμέ*, from *μοῦν*, *μοί*, *μέ* (Grimm, p. 711). It is, we believe, the fuller form of the negation (compare *â-vâ*), and is connected with the German *un-*, *ent-*, Latin *in-*. Grimm himself compares the old High German interrogative *innû*, *inû*, *ëno* with the Gothic *annu*, and sees nothing strange in the substitution of *i* in old High German for *a* in Gothic (III. p. 757). The vowel-form of the simple negation is a suffix *-at*, *-a* or *-t*, one or other of the two component letters being occasionally omitted. This suffix is peculiar to the old Norse. It is probably, as Grimm supposes (p. 718), a corruption of *vâtt*, which is used to strengthen the negation, like the German *wicht*, and the fundamental negation is omitted, as the French negative is before *pas*, *point*, *rien*,

* Whether we accept this etymology or not, there is no objection to it from the use of the word as a mere negative, having no relation to unity in particular, e. g. in *non multi*, for in these compound negatives the adjunct is very little regarded. Thus, although it is clear that *nemo*=*ne-homo*, Virgil does not scruple to write *nemo divôm* (*Æneid* IX. 6).

in *pas un mot, point du tout, rien du tout*. The prohibitive negation is in Gothic *ni* as in *ni grêt!* (μή κλαῖε); old High German the same as in *ni churi!* (*noli*); in middle High German the prefix *en* as in *en ruoche!* (*noli curare*); in Anglo-Saxon it is *ne*, frequently strengthened by a following *nā=nē-ā* (*never*), thus *nē vēp þu nā*, "weep not." Grimm's general conclusion is as follows (p. 743): "On the whole, then, there are two sorts of negation. The one quite formal and abstract, which, though at first the soul of all negation, vanishes by degrees in its separate use, and only continues its influence in connexion with other particles. It is superseded by words which properly contain the idea of *less, little, small*, either quite concretely, or perhaps in a more abstract sense. At first they are only united as companions to the negative particle, and coalesce into an equally abstract form, of which our new High German *nicht*, new Netherland *niet*, English *not* is the most striking example. Frequently, however, they dispense with the simple negative, and make a formal negation out of their diminutive-sense, as is especially shown in the Norse *icke*. This interlacing of the formal, and, as it were, material negation, explains to us two phenomena: on the one hand, the *repetition* of the negative-particle, and, on the other, its complete *dispensableness*. If our new High German *weder* (*neque*)=old High German *niwēdar*, the middle High German *wan* (*nisi*)=*newan*, the Gothic *ībai*=*nibai*: in like manner we have seen that also *stoup* ('an atom'), *wint*, *tuivel* ('devil')*, and the old Nordish *vætr* ('demon,' 'genius') serve as negatives without any preceding abstract negation. The formal negation is therefore unessential."

If now we compare this *ni, nē*, of the German dialects with the Greek negative prefix *νη-* and with the second syllable of *ἄ-νά*, we shall have no difficulty in recognising their identity. We have before mentioned, that the middle High German prefix *en-* points to a fuller form corresponding to the whole of *ἄ-νά*. The form (*nē*) of the simple negative occurs in Latin in the combination *ne-quidem* with a word interposed, and also in the compounds *non, neque, &c.*

189 In the German dialects we have seen that the prohibitive does not differ from the simple negative: the same is the case in the Latin *nē*, except that the vowel is long. In Hebrew also the prohibitive בִּלְיָ involves the same element as the negative אֵין (above, § 184). In Greek the prohibitive is μή, in Sanscrit mā, and in Persian *me*. The analogy of the German dialects might lead us, at first

* Just as "Devil a bit," is used in vulgar English to signify "not at all."

sight, to seek for some connexion between $\mu\etá$, and $n\hat{e}$, as Grimm has done (p. 745). But, when we consider that $\mu\acute{\alpha}$ and $\nu\etá$ are used in direct opposition to one another in oaths, and compare $\mu\nu$ and $\nu\nu$, the distinction between which we have pointed out before, we are compelled to seek for some way of explaining the word $\mu\etá$ less obvious but less objectionable than that of a transformation of n into m .

In the ordinary use of $\mu\acute{\alpha}$ and $\nu\etá$, the former refers to a negative oath, the latter to a positive one; moreover $\nu\acute{\alpha}!$, which bears the same relation to $\nu\etá$ that $\delta\acute{\alpha}!$ does to $\delta\etá$, is always used in a positive sense, like the Latin $n\acute{a}$. The question $\tau\acute{\iota} \mu\eta\nu$; is generally used with a negative application; $\tilde{\eta} \mu\eta\nu$, which is used as a form of swearing, is mostly found in a positive sense. With regard to $\mu\acute{\alpha}$ we believe, with Passow, that it is, in itself, neither affirmative nor negative, but gains either the one sense or the other according as it has $\nu\acute{\alpha}!$ or $\omicron\upsilon$ prefixed or understood. In our opinion $\mu\acute{\alpha}$ contains the element of the first personal pronoun; it represents an original $\mu\acute{\epsilon}\nu$, which is used for $\mu\etá\nu$ in Herodotus, and bears the same relation to $\mu\epsilon\text{-}\tau\acute{\alpha}$ that $\kappa\acute{\alpha}$ or $\kappa\acute{\epsilon}\nu$ does to $\kappa\alpha\text{-}\tau\acute{\alpha}$: so that the leading idea is that of absolute nearness to the subject. If $\nu\acute{\alpha}!$, $\nu\etá$, are, as we have no doubt they are, connected with the second syllable of $\acute{\alpha}\text{-}\nu\acute{\alpha}$, and the negative prefix $\nu\eta\text{-}$, the idea conveyed by these particles must be quite the reverse; for the leading meaning of $\nu\nu$, $\text{-}\nu\alpha$, $\nu\eta\text{-}$ is, as we have already shown, that of "distance," "separation." Grimm says (III. p. 767), "the seemingly negative form of the affirmative $\nu\acute{\alpha}!$ (Lat. *nae!*) is worthy of notice; we might compare $\nu\acute{\alpha}!$ and $\omicron\upsilon$ with the Gothic $n\hat{e}$ and jai , except that the meaning is reversed. If we take the Hessian $\ddot{a}=n\ddot{a}$, in connexion with the Swabian $et=net$, and the identity between the negative and positive expression which occasionally presents itself, there results apparently a deep-founded identity between the negative and affirmative particle, which I purposely forbear to investigate farther." All *primâ facie* difficulty occasioned by this fact vanishes when we recollect that the prefix $\nu\eta\text{-}$ is used with an intensive or affirmative signification, and in general "yes" and "no" are only emphatic expletives, which may be expressed by the two most definite pronominal words ma and na , signifying separation and distance, as well as by any one of those simple words by which we affirm or deny in our common conversation. Our own "yes" is simply the second pronoun, denoting "here," opposed to "no," the strongest form of the third element, just as $\gamma\epsilon$ and $\kappa\alpha\text{-}\tau\acute{\alpha}$ are used with an affirmative sense, in opposition to $\acute{\alpha}\text{-}\nu\acute{\alpha}$ and $\acute{\alpha}\pi\acute{o}=\acute{\alpha}\nu\text{-}\nu\acute{o}$ or $\nu\alpha\text{-}\pi\acute{o}$.

In order to explain $\mu\etá$, we must turn our attention to the other and more direct negative $\omicron\upsilon$, and consider what are the leading and fundamental distinctions between the two particles.

There can be little doubt as to the derivation of *οὐ*, *οὐκ*. The only question that could be raised, is whether we ought to derive it at once from the Sanscrit *avak* (*deorsum*), considering that an apocope has taken place in the form *οὐ*, which is Pott's opinion (*Etym. Forsch.* II. p. 134, comp. I. 273, II. 64, 183); or rather with Bopp (*Vergl. Gramm.* pp. 547, 8) connect it with the Indian-Zendic *ava*, Slavonic *ovo*, and take the final consonant as a mutilation of *-χι*, *-χί*, the Sanscrit *-chi*, *-cha*, Latin *-que*; so that *οὐ* is related to *οὐ-κ*, *οὐ-χί*, as *ne* is to *ne-c*, *ne-que*. We have no hesitation in adopting this latter opinion, which, we think, is confirmed by the appearance of the mutilated root *au* (*av*) (§ 138), with the signification of "removal," "separation," "contrast," which gives rise to the negative, in the Greek *αὔ*, *αὔ-θις*, *αὔ-θι*, *αὔ-τις**, *αὔ-ερούω*, &c., and the Latin *au-tem*, *au-t*, *haut* (*haud*), *au-fugio*, &c. (see Bopp, *l. l.* p. 546). A question might arise, whether we are to consider *αὔ*, *ava*, as simply the element *va*, a form of the first pronominal stem, with the semivowel transposed, or this same element appended to another in a similar state of mutilation. A comparison of *aufero*, with *abs-tuli*, *ab-latus*, and of *a-va* with *ἀ-πό*, also used in a negative sense, and the difficulty of explaining the second vowel otherwise, induce us to believe that *a-va-k*, *ο-ὐ-κ*, are the compound preposition *a-va*=*ἀ-πό*=*ἀν-πό*, with the element *ka* affixed; so that *a-va-k*=*οὐκ* combines the meaning of *ἀπό* and *ἐξ*. The particle *οὔν*=*avam*=*navam* is an additional confirmation of this etymology of *οὐ-κ*. Hartung justly remarks (*Partikeln*, II. 3), that the double form *οὔν*, *ᾠν*, leads us, according to the analogy of *οὔς*=*ᾠς* or *auris*, to a ground-form *αὔν*. It is doubtful whether the Cretan and Laconian word *αὔς*, quoted by Hesychius, is a synonym of *αὐτός* or of *οὔς*. He says, *αὔς. αὐτός. Κοῦρες καὶ Λάκωνες*. Now we might suppose with Soping that *αὐτός* is the genitive of *αὔς*, as *ᾠτός* is of *οὔς*. But in either case we have an analogy for the connexion of *οὔν* with *αὔ*, and the Zend neuter accusative *aom*. If this be true, *οὐ-κ* expresses a total disjunction, separation, denial; for as it means both "from" and "out of" (§ 177), it is even stronger than the Latin *h-aut* and *non*, and the Greek *ἀ-νά*, in which the fundamental meaning is the same—*i. e.* distance, removal. Accordingly, if *μά* and *μή* are connected, *οὐ-κ* must be put alongside of *ἀ-νά*, *νῆ*, and we must expect to find the same distinction between *οὐ-κ* and *μή* as we have already observed to exist between *νῆ* and *μά*. The connexion in meaning between *οὐ*, *ἀνά*, and *ἀπό*, is farther shown by the former being

* Bachmann, *Anecd.* Vol. II. p. 376, 34: τὸ αὔθις μετὰ τοῦ σ τὸ πάλιν τὸ αὔθι δὲ ποιητικόν, ἀντὶ τοῦ αὐτόθι· καὶ αὐτίς ποιητικόν, μετὰ τοῦ τ, τὸ ὕστερον.

used like the other two, as a sort of negative prefix, and even in proper names; thus we have (1) *Οὔτις*, "Mr. Nobody," Hom. *Od.* ix. 366; Eurip. *Cycl.* 549, 672. (2) *Οὐκαλέγων*, "Dreadnought," or "Carefornought," Hom. *Il.* iii. 140; Virg. *Æn.* ii. 312; Juv. iii. 198. (3) *Οὐτοπία*, *Utopia*, "Weissnichtwo," "Kennaquhair," "Lord-knows-where."

All scholars who have written on the distinction between *οὐ-κ* and *μή*, have made it consist in this, that while the former denies absolutely, the latter denies relatively to some thought or opinion of the speaker. In other words, *οὐ-κ* denies *objectively*, *μή* *subjectively**. And what could be better suited to express *subjectivity* than a word which contains, under a strong form, the simple element of the first personal pronoun? Such a word is *μή*, a stronger form of *μέ*; for *μέ* is opposed to *νή* as nearness is to farness, and *μή* to *οὐ-κ* as subject is to object. This root appears with the same notion of subjectivity in the verb *μάω=μένω*, of which more hereafter.

190 We proceed to the interrogative particles. As we have distinguished negation into subjective and objective, so Grimm considers that questions are either subjective or objective (iii. p. 751): "Intrinsically considered," says he, "there are two sorts of questions, the one requires in the answer an expression of knowledge or opinion about something, without the necessity for any direct affirmation or negation; the other sort of question, on the contrary, desires the affirming or negating determination of the answerer. In the former case the question turns upon the thing asked about, in the latter on the will or knowledge of the person questioned. The former may be called the *objective*, the latter the *subjective* question. The following are instances of the objective question: 'who is there?' 'whom lovest thou?' 'how did that come to pass?' 'when did you see him?' The following are subjective questions: 'is he there?' 'lovest thou me?' 'will you go with me?' 'is he alone?'

"This distinction according to the content of the questions is connected with the formal distinction which has been premised. Objective questions are generally expressed by the sound, subjective by a suffix.

"Inasmuch as the questioner does not know beforehand what answer will be given, all questions are naturally doubtful. The subjective question, however, is doubtful in a higher degree. The objective questioner desires information, and may receive it in an infinite variety of ways. The uncertainty of the subjective questioner is tied

* For the distinctive syntactical use of *οὐ* and *μή*, we must refer to our *Greek Grammar* (articles 528—545).

to one of two possible answers, yes or no. Accordingly, we may add an 'or not?' to every subjective question; in other words, it may be taken either positively or negatively. Instead of—'is he there?' 'lovest thou me?' it would, in many cases, equivalent to say—'is he not there?' 'lovest thou not me?' (the expectation of the questioner being the cause of preferring one mode of expression to the other). From this follows generally and at once a sort of connexion between the subjective question and the negation, which the forms of the interrogative also confirm."

The objective question is asked by the interrogative pronoun, or some word derived from it. We have before shown that this pronoun in Greek is, in its shortest and oldest form, *F-* (*ἥτις, τίς*). The subjective question is expressed by interrogative particles, of which, according to Grimm (III. p. 760), there were three forms in the Indo-Germanic languages: (1) the Gothic suffix *-u*, which he considers as perhaps related to the Greek *οὐ*; (2) the Gothic suffix *-nu*, old High German *-nû*, Sanscrit *-nu*, Latin *-ne*, Greek *μή*, old High German *-na*; (3) the Gothic *an-*, old High German *in-*, Latin *an*, Greek *οὐν*, which, he remarks, are all connected with the simple negation. To these may be added the important particle *ἄρα* or *ἄρα*, which asks the questions apparently in a negative as well as in a positive way: this also seems to have been the case with *οὐκ οὐν*. It is highly important to know that all the roots mentioned by Grimm, and the *ἄρα* adduced by us, are used not merely as interrogative and negative, but also as inferential, particles.

We have pointed out before the co-ordination which subsists between *ἄ-νά* and *κατά*, in their various uses. We find them here again employed in expressing, the former, a subjective, the latter, an objective question. Or rather the root which enters into *κατά*, and which is found more simply in *κα*, *κεν*, *κε*, is the same as that of the interrogative pronoun, which in some form or other is generally prefixed to objective questions: and both the successive mutilations of *ἄ-νά*, as well as the whole word, are found as the interrogative particle in subjective questions in the Indo-Germanic languages. When the ultimate *ἄ=ἄν* occurs in this use in Greek, it is strengthened by the particle *ῥα*, and becomes *ἄρα=ἄν-ρα*. In Latin we have *an* as a direct interrogative, and also *-ne* and *num*, the former being used as a suffix only.

Although there is no occasion to connect the Gothic *u* with *οὐ*, as Grimm has done, it is true enough that the Greeks used the objective negation in these subjective questions, sometimes in a doubled form, as *οὐκ, οὐν*, sometimes alone, and frequently in conjunction with the subjective negation *μή*, as in *μὴν=μή-οὐν*, *μή οὐκ οὐτως ἔχῃ*, &c. This

is easily explicable. We do not speak of the subjective negation in the same sense in which Grimm applies the epithet to questions which may be expressed negatively. The subjective *negation* refers to the opinion of the speaker, the subjective *question* to that of the person interrogated. But although these subjective questions always refer to some opinion, will, or knowledge of the person questioned, they may express in themselves, though faintly, an opinion on the part of the questioner. We find that in these cases the subjective negation, which refers to the speaker, is always prefixed. As a general rule, whenever *οὐ* is found in an interrogation, a positive answer is expected; and the appearance of *μή* in a question presumes a negative reply.

191 When there is such a vacillation between the affirmative and negative modes of putting a subjective question, we need not wonder that there should be a similar ambiguity in the answer. Thus it is that *ναί, νᾶ*, obviously connected with the negative root, *-να, νη-*, are always used as affirmative answers, corresponding to the English "yes." The writer in the *Philological Museum* above referred to, explains the fact thus: he asks (p. 323), "may not this connexion between the positive answers and the negative root have arisen from the use of the negative, like our 'nay,' *immo*, or *anzi* (*ante*), in Italian? which are negative, inasmuch as they object to the preceding phrase as not being strong enough, whilst they agree with its general meaning and enhance its force? Certainly, in these cases, the negative and affirmative senses often approach very near to one another, as, for instance, in the following passage of Ben Jonson: 'A good man always profits by his endeavour, *yea*, when absent, *nay*, when dead, by his example and memory.'" The opinion of Pott (*Etym. Forsch.* II. p. 65) is much the same: "*immo*," he says, "nicht bejaht sondern nur negirt, oder (steigernd) opponirt." There is, it must be confessed, much of truth in this explanation, but it is not sufficient. The proper view, we conceive, is to derive this sense of *ναί*, like the other significations of the same root, from the original idea of farness, distance, separation, conveyed by it, and in which the meaning assigned by Pott and the English critic are contained. It is curious, however, that in Latin the application of the correlative words is inverted. For *imo* or *immo* is an adverb derived from *imus* or *immus* for *infinus**, and is

* A writer in the *Classical Museum* (Vol. III. pp. 291—297) proposes to consider *immo* as a mutilation of *in modo*. This unhappy thought seems to have been suggested by the fact that *modo* is counted as a monosyllable in Terentian scanning, and that *quomodo* is represented by the Spanish

regularly opposed to *ad summum*, which corresponds to most of the uses of *γε* or *γοῦν*, and this is concessive and affirmative, whereas *immo* is at least corrective, like the Greek *μὲν οὖν* (*Grammar*, Art. 567), if it is not even negative. In the correlation, however, of the affirmative *κατά* and the negative *ἀνα*, the latter signifies "up" and the former "down," which is just the reverse of the negative *immo* and the affirmative *ad summum*. The fact is that the Roman spoke as if standing between two distant points, the one below and the other above him: whereas the Greek was contented with opposing the near to the distant; and negation is as much implied by *ἀ-πό*=*ἀν-πό* and *οὐ-κ*=*αν-κα*, which in the Sanscrit *a-va-k* signifies "down," as by *ἀ-νά*=*φα-νά*, which denotes "up."

192 From the signification of farness or distance we also explain the use of words containing the negative element as inferential particles. We have the negative root *ἀ-* for *να-* or *ἀνα-* in *ἄ-ρα*, the second part of which is the particle *ῥα*, also used separately, which, as we have before remarked, denotes motion, and is found in comparatives; so that *ἄρα* will signify distance, or progression to another step in the argument, which is the idea of an inference. It is owing to this that *καὶ ἀπ' ἐκείνου* is used for *ἄρα* in the nearest approximation to a regular syllogism which is found in Thucydides, namely, in VI. 89: (a) *τοῖς γὰρ τυράννοις ἀεὶ ποτε διάφοροί ἐσμεν*· (b) *πᾶν δὲ τὸ ἐναντιούμενον τῷ δυναστεύοντι δῆμος ὠνόμασται*· (c) *καὶ ἀπ' ἐκείνου ξυμπαρέμεινεν ἡ προστασία ἡμῖν τοῦ πλήθους*. We have also a distinct reference to the original meaning of *ἄρα* in those cases in which

como, Italian *come*, and French *comme*. But in the Latin authors themselves *modo* and *quomodo* are never written *mo* and *quomo*, and conversely we never find *immodo* for *immo*, to say nothing of the fact that, although we have *in modum*, *ad modum*, and *in morem*, *ad morem*, *in modo* would be as surprising a piece of Latinity as *in more*. Any good Latin scholar must see that the citation of *illico* for *in loco* is no justification of the assumption that *immo*=*inmodo*; for though we may say, *dulce est desipere in loco*, we cannot say, *in more modoque apud Matinæ*. Then if *immo* were felt to be equivalent to *in modo*, Cicero would never have written *et quid dico nuper? immo vero modo ac plane paullo ante vidimus*, &c. Lastly, which is the main point, *ad modum* is used in answers to questions, in the sense "yes, by all means," which is surely the antithesis of *immo*, "nay;" and it would be somewhat remarkable if *in modo*, supposing the existence of such a phrase, were the exact opposite of *ad modum*=*in modum*. As the writer in question is distinguished by a confident assumption of superiority, we have thought it worth while to show that in this case at least he has proved nothing except the laxity of his own Latin scholarship, which he has elsewhere compromised, by asserting that C. Verres had probably no gentile name; by saying that *arcesso* is derived from *arcio* in the same way as *facesso* is from *facio*; and by treating *repetundæ* (which never appears except in the genitive and dative plural of the attracted gerundive) as a regular Latin substantive!

it expresses that the existing state of things is at variance with our previous expectations. Here it implies that *at the advanced point* at which we have arrived, we are enabled to detect a fallacy which had previously eluded our observation: so that *after all*, the state of the case appears widely different from our antecedent notion respecting it. In this usage, it very often amounts to a declaration of regret and disappointment, in accordance with our collocations "so then," &c. The following passages will make this sufficiently clear; Soph. *Electr.* 934:

ὦ δυστυχής· ἐγὼ δὲ σὺν χαρᾷ λόγους
τοιούσδ' ἔχουσ' ἔσπευδον, οὐκ εἰδυί' ἄρα
ἵν' ἤμεν ἄτης· ἀλλὰ νῦν, ὅθ' ἰκόμην,
τά τ' ὄντα πρόσθεν, ἄλλα θ' εὐρίσκω κακά—

"I brought the news not knowing, *as it seems*, in what misfortunes we were *all the while* involved, but now, &c." Id. *Ibid.* 1175: ὥς οὐκ ἄρ' ἤδη τῶν ξυῶν οὐδέν κακῶν. Eurip. *Troad.* 414: οὐδέν τι κρείσσω τῶν τὸ μηδὲν ἦν ἄρα*. Cf. Id. *Ibid.* 109. Herod. iv. 64: θέρμα δὲ ἀνθρώπου ἦν ἄρα σχεδὸν δερμάτων πάντων λαμπρότατον λευκότητι, "so then it seems that after all the human skin is, what we should not expect, nearly the whitest of all skins," meaning that if we had not laboured under that error, tanners would have made some use of our hides. Thucyd. i. 69, § 4: ἐλέγεσθε ἀσφαλεῖς εἶναι, ὧν ἄρα ὁ λόγος τοῦ ἔργου ἐκράτει, "you were said to be safe persons, but it seems that after all your character was better than the reality." This usage ought to be restored to a very corrupt passage of Æschylus, where we obtain a simple metre and an intelligible meaning by reading (*Choeph.* 73 sq.):

ἐμοὶ δ'—ἀνάγκαν γὰρ ἀμφίπολιν
θεοὶ προσήνεγκαν· ἐκ γὰρ οἴκων
πατρῶων δουλίαν ἐσᾶγον αἶσαν—
δίκαια καὶ μὴ δίκαι' ἀρχὰς βίου
πρέποντ' ἄρ' ἦν αἰνέσαι
πικρὸν φρενῶν στύγος κρατούσῃ.

The phrase *πικρὸν φρενῶν στύγος* is given in the best MSS. and is justified by *Agam.* 1279. The *φερομένων* of the MSS. is a corruption of *φρενῶν*, βία of βίου; and the missing ἄρ' ἦν were absorbed by the first syllables of ἀρχὰς which follows *πρέποντ'* in the manuscripts, and of αἰνέσαι, which must have followed the whole phrase in the original text. Hence we have ἄρα as a term of sorrow, Soph. *Aj.*

* The phrase ἦν ἄρα may be illustrated by the combination τὸ τί ἦν εἶναι, by which Aristotle so often signifies the formal cause.

1025: πῶς σ' ἀποσπάσω τοῦδε κινώδοντος, ὅφ' οὐ φονέως ἄρ' ἐξέπνευσας, "by means of which, as it seems, (or to my sorrow) you have been slain." Similarly in Latin, Hor. i. *Carm.* 24, 5: *ergo Quintilius perpetuus sopor urget*, "So then Quintilius is dead after all!" Cf. *Serm.* ii. 5, 101 (Heindorf, p. 376). From this we may see that Dr. Cyril Jackson was not so far from the truth when he translated *Τρῶες ἄρα*, "the Trojans—God help them!"

We have the negative root *να-*, with a weaker inferential sense, in *vv*, *vñv*=*na-va*, *na-va-n*, Latin *nam*, and the direct negative *οὐ-κ*, as we have before observed, appears in *οὐν*=*na-va-n*, with the same ending, and nearly the same meaning as *vñv*. This last particle always refers to something that has gone before; it takes up what has been said, and continues it; so that the ground-meaning is still the same, namely, that of farness. We shall see below (§ 202) that the same explanation applies to the use of *vñv*, *nun-c* as particles of time.

193 There are still other modifications of the idea of distance or progression, to which we will now advert. Words with much the same signification appear in weaker or stronger forms in the Greek language. Thus we have both *ἔτι* and *εἶτα* (comp. *ἀντί* and *ἄντα*), *ἄταρ* and *αὐταρ*, *ἄρα* and *ἄρα*, *ἐν* and *ἐν*. The same is the case in Sanscrit. We find pronominal roots *ana* and *ēna*, *ava* and *ēva*, *ati* and *ēta*, which have the same force, for they all alike signify distance. Bopp is unquestionably right in identifying *ἔτι* and *ati* (*Demonstrativstämme*, p. 16), which are to be considered as by-forms of *εἶτα* and *ēta*. A comparison of the Sanscrit and Greek enables us to explain the Greek and Latin particles *en*, *ἦν*, *ἦν*ιδε, which have occasioned much difficulty to scholars. That *en* and *ἦν* are identical can scarcely be doubted, and we must also recognise the affinity between these particles and the Hebrew עַן and אַן. The only question is, how to explain *ecce*, *ecquis* in Latin, and *ἦν*ιδε in Greek. There is no instance, so far as we know, of a change of *n* into *c* in the former language, therefore *ecce* which is a synonym for *en*, cannot be a compound of *en* and *ce*: and the same remark applies to *ecquis*. We adopt, without hesitation, the suggestion thrown out by Pott (*Etym. Forsch.* ii. p. 138), that the first part of *ecce*, *ecquis*, is a pronominal root analogous to the Sanscrit *ēta*: comp. *iccirco* for *idecirco*, *accingo* for *adcingo*, &c.: in fact, *etquis* is often found in old MSS. The pronominal roots *ēta*, *ēna*, equally signify distance: they point to the *there* as removed beyond some other point. Now this is the ground-meaning of *en* and *ecce*: they are particles which are used to attract the hearer's attention to an object distinct from him and the speaker, and for this purpose a word strongly marking distance would natu-

rally be used, and the element of the second pronoun is appended in the case of *ec-ce*, in order to mark the approximation or importance of the distant object to the speaker or hearer. As *ιδεῖν* denotes merely "to see," but *ιδέσθαι* is "to view for oneself," "to see with interest," "to gaze upon" (Henrick, *Herod.* p. 48), we may understand why *ιδού* is so frequently used as an interjectional word. The particle *ἦν* is related to *ἦν* as *ννν* is to *ννν*, and *δα* to *δῆ* (Pott, l. c.). Hartung supposes (*Partikeln*, I. p. 273, note) that *ἦνδε* is merely this *ἦν* with the suffix *δέ*. Although this is possible, a comparison of *ἦν ιδού*, which also occurs, of the French *voilà*, of the German *sieh da!* and of our "lo you there" (look there), inclines us to suppose that this word is nothing but a compound of *ἦν ἴδε*, "see there." This shows us too that the real meaning of *ἦν* is that of *éna*; that in fact it is only a pronoun like the Gothic *þaruh*, "there," which is used by Ulphilas to translate *ιδού* (Grimm, III. p. 172).

194 To the idea of distance or progression some of the copulative conjunctions are also due. The Latin *et*, *at* are to be compared with *ἔτι*, Sanscrit *ati*; for *ἔτι*, *εἴτα*, are used in Greek very much in the same way as the copulative conjunctions. As a prefix we have *at-* in the Latin *at-avus*, and in Sanscrit we have *ati-* in *ati-mâtra-s*, "in excessive measure," *ati=râtra-s*, "in the depth of night," &c. That these particles contain the element *va* appears from the analogy of *ἐν* and *ἀνά* (§§ 170, 183), and might be inferred from the Behistun synonym *u-tâ* (Rawlinson, *As. Soc.* XI. 1, p. 80). But the affinity of *ἔτι*, *εἴτα*, to *ἐν*, *ἀνά*, is by no means limited to this *Anlaut* or initial articulation. There is every reason to conclude that the two former contained also the characteristic nasal of the two latter. For if *ἐ-π* and *ob* are by forms of *ἄμ-φ* and *amb-* (above, § 172); if the augment *ἐ*=*ἀνά* (§ 370); if *ἄ-τε*, compared with *ἄν-εν*, belongs to the same class with the Sanscrit *antar*, old Persian *atar*, Lat. *in-ter*, German *un-ter* (§§ 170, 204); then *ἔτι*, *εἴτα*, Sanscrit *ati*, Latin *ad*, *at*, *et*, must be classed with *ἀντί*, *ἄντα*, *und*, *and*. Nor is it at all difficult to see the connexion in meaning. The idea of *ἐν*, *ἀνά*, English *in*, *on*, is that of placing something away from ourselves. Hence the idea of distance, and from this the use of *ἀν-* (*â-*), Latin *in-*, as negative prefixes. The idea of motion is conveyed by the affixed *-s*, *-d*, *-τι*. Thus we have *εἰς*=*ἐν-s*, "unto;" *ad*=*and*, "to or thereto;" *ἀντί*, *ἔτι*, *ἄντα*, *εἴτα*, "in front of" or "besides." As a copulative conjunction, the form, which appears as *ati*, *ἔτι*, *et* and *at* in Sanscrit, Greek, and Latin, is retained complete in all the Teutonic languages, except the Gothic and Scandinavian. Thus we have in old High German *anti*

(with the variations *enti*, *endi*, *inti*, *indi*, *unte*, *unde*); middle High German *unde*, *unt*; old Fr. *ande*, *and*; mid. and new Netherl. *en*; Anglo-Saxon and English *and*; and the same form appears, as a prefix, in the Gothic and Norse languages also (Grimm, III. pp. 271, 2; Graff, *Sprachsch.* I. 362, cf. 352). In this fuller form the copulative conjunction appears as a verb of motion in most of these languages, which also give us the movable digamma, as in *ἀνά*=*ἑνά*. Thus we have Goth. *vandjan*, A. S. *vendan*, Engl. *wend*, *went*, by the side of *enden*, Gothic *andeis*, "end;" and the O. H. G. *gi-want*, O. S. *gi-wand* mean "finis," "terminus." Grimm (*Grenzalterthümer*, p. 6) suggests that the old High German *anti* and *andi*, "end," are derived from the particle *and* and denote the "end," as "äusserste Entdeckung in Raum und Zeit." The original meaning then of the verbs *enden* and *wenden* must have been "to go," "to go up," "to complete the act of going," "to arrive at the turning-point." The Semitic languages furnish us with a striking analogy in עָלָה "he went up," הָיָה "he came," manifestly connected with the particles עַל "up," and אִתָּה, which not only means "with," but also denotes the definite object of the transitive verb. The instances given above (§ 114 *ad fin.*) make it more than probable that אִתָּה stands for אִתָּךְ, and the dagesh אִתָּה represents אִתָּךְ, in which the full form of *άντα* is preserved. This latter particle corresponds in usage to the apodotic *άν* (*Maskil le Sopher*, p. 30). The Hebrew עַד corresponds both in form and meaning to the Latin *ad*, and the change of breathing from א to ע is not at all uncommon. We have discussed this subject in general in the *Transactions of the Philological Society*, 1854, pp. 291 sqq.

195 The Latin language has not only the preposition *ad* and the conjunction *et*,—as a mere particle of addition and progress,—and *at*,—as signifying in an adversative sense "still," "yet," "continuing this state of things,"—but also uses the enclitic particle *-que* as a copulative conjunction, and combines this with *ad* or *at* in the form *atque* or *ac* (compare *neque*, *nec*) to imply that there is not only an addition, but also an intimate connexion between the things coupled together, such as that of cause and effect. The Zend *at-ça*=*at-que* seems to be rather a compound of the same kind, than the neuter of the pronoun *a*, with the enclitic conjunction appended, as Pott supposes (*Etym. Forsch.* zw. Aufl. p. 253). The Greek language does not use *ἐτι* for *et*, still less *ἐτι τε* for *at-que*, but it uses a form corresponding to *que* and the Sanscrit *-cha*, both as an enclitic and as an independent word, both as an indefinite antecedent and as a relative particle. We refer of course to *τε* and *καί*, which are ultimately iden-

tical with *κεν* and *ἔν*, and perform corresponding functions. When we compare *ὅκ-κα*, &c. with *ὅ-τε*, &c., and *τέσσαρες, τε*, with the Sanscrit synonyms *chatur*, *cha*, and the Latin *quatuor*, *que*, and remember the connexion which subsists between *cha* and the interrogative stem *ka*, and between the first part of *cha-tur*, and *ê-ka*, English *each* (comp. *qua-tuor*, and *æ-quus*), we shall find it difficult to deny the relationship of *τε* to *καί**. Hermann, with a different view, has endeavoured to establish the identity of *τέ*, *κέν* (which he derives from *καί*), and *πὺ* (*κού*) in the sense of "perhaps" (*de Particulâ ἔν*, *Opusc.* iv. pp. 4, 9 foll.): their correspondence, in this respect, can only be explained by the fact which he has overlooked, that they are all forms of the indefinite pronoun, and are all used to convey that indefinite idea of locality to which their meaning of doubtfulness is due: (*κά*) *κέ*, *κέν*, bear the same relation to *καί*, that *δέ*, *δέν*, do to *δαί*, which, like *καί*, is never used as an enclitic. The distinction between *τε* and *καί* consists merely in this, that *τε* is an indefinite enclitic word, always placed after the word to which it refers, whereas *καί* is generally placed before the words to which it belongs, and is used rather in a relative than in an indefinite sense. Though we constantly find *τε—καί*, we seldom have *καί—τε*: the former collocation answers pretty nearly to "somewhere—where." The use of the combination *καί τε* is of itself a proof of the relative power of *καί*, for *τε* is continually found in immediate connexion with relative words, as *ὅς τε*, *ὥς τε*, *οἷός τε*, *ὅσος τε*, &c. (below, § 197).

196 The investigation of the use of copulative conjunctions, or of the connexion of sentences, is a question of syntax, on which we must make a few remarks here, though it may appear at first sight to be in some measure foreign to our leading object. When we wish to speak of something that happened as subordinate to, or in connexion with, some other thing that we are speaking about, we may express this occasionally by a participle or infinitive mood; but in the majority of cases a greater degree of definiteness is required, and then we invariably call in the aid of some word of pronominal origin to connect the two statements together. These auxiliary words are relatives, whether they appear in the form of adjectives or of adverbs. The correlation of two sentences is effected either by placing the relative word in both clauses, as in the Latin *qua—qua*, Greek *καί—καί*; by placing an indefinite in both sentences, as *viri-que*, *fæminæ-que*, *ἄνδρες*

* In the relative value of the copulative conjunction it may be worth while to refer to L. Tobler's paper "On the relative use of the German *und*" (*Zeitschr. f. vergl. Sprachf.* vii. pp. 353 sqq.).

τε θεοί τε; by placing the indefinite in the first clause and the relative in the second, as in -τε—καί, or, by an inversion common enough in Greek and Latin, putting the relative clause first, as in *quum—tum*; or, finally, by putting a demonstrative in each sentence, as *tum—tum*, which was probably the original formula (above, §. 148). The primary mode of balancing sentences appears to have been by placing the same particle in each clause in order that the similarity of sound might help the ear. But, by the same process which led to the division of pronouns into definite and indefinite, a distinction was made between the forms as stronger and weaker; the latter preceded, and the office of uniting the two parts of the sentence devolved upon the former.

Like the Latin *-que* and the Sanscrit *-cha*, the enclitic -τε is often rather emphatic or introductory of an explanatory circumstance or apposition, than strictly copulative, as combining things in themselves distinct and independent. In Æschylus, in particular, we have observed that τε may often be rendered “namely,” “that is to say,” “even,” rather than “and.” Thus to take the *Agamemnon* only we have the following examples, 10: ἐκ Τροίας φάτιν ἀλώσιμόν τε βάξιν, “a report from Troy, even the tidings of its capture;” 123: ἐδάη λαροδαίτας πομπούς τ’ ἀρχάς, “he recognised the devourers of the hare, that is to say, the leaders of the expedition;” 210: πανσάνεμον θυσίας, παρθενίου θ’ αἵματος, “a sacrifice to lull the winds, to wit, the blood of a virgin;” 229: βία καλλίνων τ’ ἀνανόδῳ μένει, “by violence, yea, even by the voice-constraining force of muzzles.” Similarly in the *Eumenides*, 690: Ἀρεὶ δ’ ἔθυον, ἔνθεν ἔστ’ ἐπάννυμος πέτρα, πάρος τ’ Ἀρειος, “they sacrificed to Ares, whence the rock derives its name, that is, the hill of Ares.”

In its usage the Latin enclitic *-que* corresponds to the Greek -τε, but it bears more external resemblance to καί, or rather to the κα which appears in ὄκ-κα = ὄ-τε, πό-κα = πό-τε, εἰ-κα = εἰ-τε, Latin *si-qua*. We find this older and more genuine form of the Greek enclitic also in the adverbs αὐτί-κα, πηνί-κα, ἡνί-κα, τηνί-κα, &c. Bopp supposes that the termination of these words is νίκα, αὐτίκα being a contraction for αὐτηνίκα. The termination -νίκα he compares with the Sanscrit *nish*, nom. *nik*, “night,” which is found in *anisham*, “for ever,” i. e. “without night” (*über den Einfluss*, &c. p. 10; *Vergleich. Gramm.* p. 614). This is quite inadmissible. Nor can we approve of Buttmann’s supposition that the termination is -ίκα, the accusative of an obsolete ἴξ, analogous to the Latin *vix*, *vices* (*Lexil.* II. p. 227). When we compare the νῦν, νυνί, ἦν, ἡνί, mentioned above, and remember that δῆν is often used to signify time, and that αὐτί, αὐτε, αὐθις, &c. occur separately, we must conclude that the termination is -κα.

When we 'recollect, too, that the Latin *donec*, *doni-cum*, *deni-que*, *nam-que* (*nem-pe*), *quando-que*, and the Greek ὅ-τε, πό-τε, τό-τε, εὖ-τε, &c. are also particles expressing time, we are driven to the conclusion that the last syllable of ἀντί-κα, πηνί-κα, &c. is also the interrogative stem, used as an enclitic like the Latin *-que*. The same is to be said of the termination of τετρά-κις, &c. The compounds ὅπως (ὀ-πως) and ὅ-φρα must not be confused with one another: the former is a compound of the ordinary relative with the indefinite, the whole being expressed in the ablative case, while ὅφρα is the same relative with the suffix πα-ρά, the π being changed into φ either from the contact with ρ or by a transfer of the initial aspirate.

197 Although our analysis of the original forms of the pronominal roots has led us to consider τε as belonging to the interrogatives and ultimately to the relatives, we find that this enclitic is constantly used in combination with the stronger relative forms ὅς, καί, πο-, κο-, οἷος, &c., and with the demonstratives το-, τοῖος, &c. We need not wonder at this, for the stronger form is often placed before the weaker in the languages with which we are concerned, especially when the weaker form has by mutilation or otherwise lost to any considerable extent its external resemblance to the stronger form with which it is connected. The addition of the indefinite to the relative occurs more frequently in the older than in the more recent Greek writers. The effect of it is to give greater emphasis to the relative sentence. We have before referred to the mode of expressing the correlation of two sentences by putting the same particle in each. In process of time different variations of this practice came in. One of the first would be to place the two correlative words together (for instance καί-καί, *qua-qua*),—the natural consequence of which would be to shorten one of them—and then to cause its omission altogether. The sentence, *is tibi notus est æque ac mihi*, might be written *is notus est qua tibi, qua mihi*, or *is notus est tibi at-que* (and besides) *mihi*. Another step would be to put the indefinite or weaker form into the first sentence, and the relative or stronger form into the other. An instance of this is the common use of τέ and καί. If, however, it was desired to give particular emphasis to the relative clause, the word which was found in the antecedent clause would be repeated in the relative clause, though the relative word alone was sufficient to express the general correlation. Thus *Iliad* xvi. 9: ἦντε κούρη νηπίη, ἦθ' ἅμα ματρὶ θεοῦς' ἀνελέσθαι ἀνῶγει εἰανοῦ ἀποτμήνη καὶ τε ἐσθνυμένη κατερούκει. Xenophon, *Anab.* ii. 1, §. 22: καὶ ἡμῖν ταῦτα δοκεῖ ἔπερ καὶ βασιλεῖ. Lastly, just as the relative adjective is put alone in certain cases without a formal expression of the antecedent, the antecedent particle also is

omitted; but to give the full definiteness required by the relative sentence, not only the relative, but the antecedent particle is retained in it. Of this usage of *καί* we have an infinity of examples even in the Attic writers; of the separate use of *τε* with the relative words the instances in the Attic writers are comparatively rare, with the exception of the combinations *ἄ-τε*, *ὥς-τε οἶός τε*, and to these may be added the analogous compound *ὅς-τις*, which is to be explained by an application of the same principle. *Οἶός τ' εἶμι* always means, in the Attic writers, "I am able." In the older writers *οἶός τε* signifies "precisely such," and chiefly appears in comparisons. Thus *Odyss. xxi. 173: τοῖον—οἶόντε θνυτῆρα βιοῦ τ' ἔμειναι καὶ οἰστῶν*. It is quite clear that, though the meaning is idiomatically restricted to the idea of ability in the Attic dialect, this notion of a comparison is the basis. In that dialect the omission of the antecedent clause is more common than in any of the other varieties of the Greek language. Such an omission has taken place here, and *οἶός τ' εἶμι* is equivalent to *τοῖος εἶμι, οἶός τε ποιεῖν ταῦτα*, "I am the *particular kind* of person to do these things," i. e. "I am calculated for the performance of such and such things." In the same way *οἶός καί* is also used. We have striking instances of the definiteness thus communicated to the relative clause by the addition of *τε*, in *ὅσον-τε* used in definitions of numbers: e. g. *Herod. iii. 5: ἐὼν τοῦτο οὐκ ὀλίγον χωρίον, ἀλλ' ὅσον τε ἐπὶ τρεῖς ἡμέρας ὁδόν*. And in *ἐφ' ᾧ τε*, which is used to express the terms of a condition. *Herod. i. 22: ἡ διαλλαγή σφι ἐγένετο, ἐπ' ᾧ τε ξείνους ἀλλήλοισι εἶναι καὶ ξυμμάχους*. Like *ὥστε* we find *ἐφ' ᾧ τε* with the indicative as well as with the infinitive: comp. *Thucyd. i. 103, 113*, where we have the future indicative. We also find *ἐπὶ τοῖσδε, ὥστε* (*Thucyd. iii. 114*). The same expression of definiteness is conveyed by *-τε* affixed to temporal particles, such as *πό-τε*, *ὁ-πότε*, *ὅ-τε*, *τό-τε*, *ἐκάστο-τε*, &c. And when the relative is used, even in Attic Greek, with this temporal reference, the *τε* is sometimes appended, as in *Æschyl. Pers. 748: ἐξ οὔτε τιμὴν Ζεὺς ἐμοὶ τήνδ' ὥπασεν*. *Eumen. 25: ἐξ οὔτε Βάκχαις ἐστρατήγησεν θεός*.

198 The enclitic *τε* appears to be used for the relative in *ἐς τε*, &c.; the same is the case in the Latin *us-que* compared with *ἕως οὔ*, *μέχρι οὔ*, &c. *Τοι* has no connexion with *τε*; it is simply a case of the third personal pronoun. Its perfect identity with the demonstrative appears from the fact that *καὶ τοι* and *καὶ ταῦτα* are synonyms. English scholars generally translate the latter "and this too;" a translation which applies to very few of the passages in which this combination occurs. It is of course the proper rendering in those cases where the pronoun is regularly declined as an adjective, as, for

instance, in Aristoph. *Plutus*, 545: *πιθάκνης πλευράν, ἐρῶγυῖαν καὶ ταύτην* (where see Dobree's note). In general, however, it corresponds exactly to *καὶ τοι* and means "although," "and yet." For instance, in Æschylus (*Eumen.* 113) it is used as a particle with a finite verb: *καὶ ταῦτα κούφως ἐκ μέσων ἀγκυσμάτων ὥρουσεν*. When it comes after other words, *τοι* is written as an enclitic. We do not believe that it ever approached to the indefinite meaning which is proper to enclitics, and its appearance at the beginning of a sentence in the combinations *τοίγαρ*, *τοιγάροι*, and even the use of *τοίνυν*, prove that it ought not to be considered as a merely dependent particle. It is strictly a demonstrative adverb.

199 The ordinary disjunctive in the Greek language is the simple vowel *ῥ*. Pott justly remarks (*Etym. Forsch.* II. p. 321) that the number of words of different origin which this same vowel is used to represent is a striking proof of the corruptions which have crept into the Greek language. He enumerates the following: *ῥ* = *ait*, Sanscrit *āha*; *ῥ* = *ῥα* (*eram*), Sanscrit *āsa*; from the same root *ῥ* = *siet*, *sit*; *ῥ* interjection; *ῥ* = Sanscrit *sā*; but *ῥ* (*quæ*) = Sanscrit *yā*; and *ῥ* or *ῥ̃* = *suæ*, which is quite different from *ῥ̃* = *cui* feminine. This is sufficient, he adds, to show that the Greek etymologer cannot expect much success if he pays no attention to the cognate languages. According to the principle which we have often referred to, we are justified in comparing *ῥ* and *ῥ̃* (in *ῥ̃τε*) with the Sanscrit disjunctive *vā* or *vā*. With regard to the substitution of *ῥ* in Greek for *va* in Sanscrit, Hartung (I. p. 217) properly compares *svādu* (*sua-vis*), *ῥδύς*; *vāch* (*vox*), *ῥήχ*. The following instances belong to what we have called the change of place of the digamma: *vāmi*, *ῥφημι*, *αὔρα*, *ῥφήρ* or *ῥήρ*, *ῥέρ*; *ῥώς*, *ῥός*; *vānkh*, *εὔχομαι*; to which we may add *ῥύς*, *ῥ̃*, *ῥ̃*, compared with the Sanscrit synonym *vasu* (see Benary, *Berlin. Jahrb.* Aug. 1834, p. 230). The Sanscrit *vā* also signifies "like," "as," and in this it coincides with the Greek *φῥ* or *φῥ̃* = *ὥς*, which bears the same relation to *ῥ* that *φῥημι* does to *ῥημι*. Buttmann supposes that *φῥ* is connected with *πῥ*, as *φανός* with *πανός*, *φάρσος* with *pars*, *φανόλης* with *pænula*, *flagrum* with *πληγή* (*Lexil.* I. p. 241). The same seems to have been the opinion of C. O. Müller (Grimm, *Deutsche Grammatik*, III. p. 770). This leads us to the second pronominal stem *ῥα*, or, as it is more generally written in Greek, *σφῥέ*. The shorter Sanscrit form *vā* corresponds to the Latin *-vē*. That *vēl* contains the root of *velle*, as Hartung (II. p. 63) and Pott (II. p. 317) suggest, seems to be proved by the similar use of *heris* in the Umbrian, as *heris vinu*, *heris puni*, "either with bread or wine;" for this particle of choice is obviously derived from the

root *hri*, "to choose," אִי־חָ, cf. חָל-חָ, old Latin *hir*, "a hand;" we have the imperative *heri-tu* in the Eugubine tables, and the same verb occurs in Oscan (*Varron.* p. 92). This conclusion might seem to be favoured also by the assumed connexion between the Hebrew וְ "or," and the root וָהָ or וָהָ (cf. וָהָ and the Latin *aveo*) "he desired." But there is no reason to adopt this etymology of וְ; which is much more likely to have been an extension of ו = *ve* or *tum*, to which it bears the same or nearly the same relation as לָ does to לָ (*Maskil le Sophér*, p. 15). In this way we get back to the second pronominal element of which ו is a residuary form. With regard, however, to *vel*, we must remember that it sometimes appears in another sense of the verb *vol-o*, as when it means "for example," i. e. "take this" (*Plaut. Miles Glor.* v. 59). And its use, by the side of its synonym *libet*, as an affix to the relative, in *qui-vis*, *qui-libet*, seems to justify its application as an alternative conjunction. The particle *quam*, which is the Latin representative of הָ as a particle of comparison, stands in direct opposition to *-vis*, *-libet*, as a relative affix. The difference between *qui-vis* or *qui-libet* and *quis-quam* is simply this; the former means "any one selected from any given number," "any one *you please*," so that all are included in the range of choice; but *quisquam*, like *ullus*, means "any one at all," the selection not being supposed; in other words, *quis-quam* is exclusive*: thus Seneca, *de Tranquill.* 11: *cuius potest accidere, quod cuiquam potest*. That *-piam* may be identical with *quam* in signification, as it is in origin, would appear from Cicero (*in Verrem Actio*, II. Lib. I. c. 10): *nego esse quicquam a testibus dictum, quod aut vestrum cuiquam esset obscurum aut cujusquam oratoris eloquentiam quæreretur*. Practically the substantive *quisquam*, like the adjective *ullus*, is confined to sentences which are formally or virtually negative. As in Ovid, *Metam.* II. 58: *placeat sibi quisque licebit; non tamen ignifero quisquam consistere in axe Me valet excepto*. It derives this meaning, however, from that other use of *quam* in comparisons, in which it so exactly corresponds to הָ. For *quis-quam*, "any one at all," means "a person of any manner or kind." Similarly *per-quam* is "in a very high manner, kind or degree;" *ne-quam* is "in no manner or degree," i. e.

* It is a remarkable proof of the laxity of modern Latin scholarship that all the recent editors, so far as we know, acquiesce in *et latus Oceano quisquam Deus advena junxit* (Ovid, *Fast.* v. 21). It is manifest that *quisquam* is inadmissible here, and we propose to read *quisquis*, with the punctuation, *et latus Oceano, quisquis Deus advena, junxit*, i. e. "whatever God happened to come up." Cf. *Plautus, Amphitr.* I. 1, 156: *quisquis homo huc venerit, pugnoscet*.

utterly worthless; *neuti-quam*, "in no way" (*nullo modo*, &c.) (Pott, *Etym. Forsch.* zw. Aufl. p. 149). It is a mistake to suppose that *ali-quis* can ever be rendered by the English word "any," or that it is ever equivalent to *quispiam*, as Heindorf supposes (on *Hor. Sat.* i. 4, 35, p. 95). All compounds with *ali-* (*ali-quis*, *ali-quot*, *ali-quando*, *ali-cubi*, &c.) are definite, and must be rendered by the English word "some." So that *aliquis* approaches more nearly in meaning to *quidam* than to *quispiam*, which usually means "*any one* in general," rather than "*some one* in particular," which is the force of *aliquis* and *quidam*. It is remarkable, however, that *aucun*, which must have been originally *aliquis unus*, performs the same functions as *quisquam*: for *non vidi quenquam* might be rendered: *je n'ai vu aucune personne*

200 There can be no doubt that the ἥ used in comparisons is the same word as the disjunctive ἥ, and there is every reason to believe, on the other hand, that the disjunctive and comparative ἥ (epic ἡέ, ἡέπερ) = *va* is simply the second or relative pronoun. In Latin the clause compared is connected with the clause on which it depends by *quam*, a case of the relative, and the Sanscrit *vā*, when it means "in which manner," is clearly relative. In the same way *wan*, also connected with the relative, is used in middle New German (Grimm, iii. pp. 183, 283). In Greek and Latin there are in fact two ways in which the standard of comparison may be expressed. It may either be represented by the case of ablation, i. e. the genitive in Greek and ablative in Latin, as οὗτος σοφώτερός ἐστιν ἐκείνου, *iste est illo sapientior*, "this man is wiser, stands in a higher grade of wisdom, in relation to that man;" or the standard of comparison is introduced by the relative particle ἥ, *quam*, signifying "in the manner in which" (like the German *als*, a mutilated form of *al-sô*), as ἀρελοσὺν ἡέπερ ὑμῖν ἀνδράσιν ὠμίλησα, *cum fortioribus quam vos estis viris versatus sum*, "I have kept company with men brave in a higher degree, as compared with the manner or degree in which you are brave." Our *than*, only another way of spelling *then*, is more nearly connected with the demonstrative, and expresses, like the Greek comparative termination, that in the given relation that which is mentioned in the second clause comes after that which is mentioned in the first: "Peter in greater *than* John," i. e. "Peter is greater, *then* (comes) John." Although relative words are not directly used to connect the terms of a comparison in Greek, we see traces of the feeling which led to their use in other languages, in such phrases as μέλιων ἢ κατ' ἀνθρώπων, ὁ ἄσσοις ἢ ὡς—, κακίων ἢ ὥς τε—, where the difference is expressed as well as the likeness.

201 *ἦ* is found in immediate conjunction with μέν, δέ, δή. Ἡμεν—ἦδὲ are not disjunctives, but copulatives, signifying “both—and;” ἦ in this combination is, therefore, to be compared with the use of the Sanscrit *vā* for “as;”—“as in the first place—so in the second place.” Of μέν—δέ it is unnecessary to add any thing to what has been already said (§§ 154, 155). They are generally and properly correlatives, though sometimes πλὴν, “farther,” ἄλλο, “another,” are substituted for δέ, to which their meaning is very much akin. As a general rule, ἀλλά is opposed not to μέν, but to οὐ, just as *sondern* in German expresses the opposition to a negative, and we often find a sentence in which οὐκ, ἀλλά, are opposed, including two others which contain an opposition of μέν, δέ. Thus Eurip. *Med.* 555:

οὐχ, ἦ σὺ κνίξει—σὸν μὲν ἐχθαίρων λέχος
καυνῆς δὲ νύμφης ἱμέρω πεπληγμένος—
ἀλλ’ ὥς κ. τ. λ.

202 *ἦδη* is almost always used as an expression of time, but this is not its inherent signification or the primary meaning of its second syllable. Hartung, whose account of this word (*Partikeln*, i. pp. 222—322) is very unsatisfactory, considers ἦδη as prior to δή (p. 245), refers all the meanings to a temporal one, and derives the second syllable from the Sanscrit root signifying “day” (pp. 223 foll.), which is as objectionable as Bopp’s derivation of the ending -ν-κα from *nisham*, *nox*, or Pott’s comparison of *ya-di* with *dies*. We have before shown that the idea of intervals or positions belongs to the primary thought-form of space, and that the words by which this idea is conveyed are pronouns, that is, words indicating position. Such a pronominal word is δέ, which, we have seen, indicates relative nearness, and therefore enters into the second personal pronoun, the second numeral, and a number of other pronominal words conveying the same idea. That such a pronominal word should be used to express “what is near to the *now*” as well as “what is near to the *here*,” is only what we should expect; and this is the full extent to which the idea of time enters into δή and ἦδη. We have before pointed to the connexion between this root and the preposition δια. The idea of duration is derived from that of division or passing through, and thus it is that *diu* signifies both length of time generally, and also the particular length of a day (*inter-diu*, compare *inter-dum*, where the root retains its more general meaning); it is, therefore, more than probable that the Latin *dies*, the Sanscrit *diva*, *dyu*, &c., are connected with this pronominal root, just as we have already seen that other words of the same kind are manifestly of pronominal origin; but to say conversely that a word like δή, which enters into

such a vast number of combinations, which very often has not the slightest reference to time, and which is so obviously connected with an extensive class of pronominal roots, is derived from such a secondary idea as that of "day," is opposed to all the principles of a systematic analysis of language. Hartung supposes (I. p. 230) that *jam* is connected with *dies*, Sanscrit *dyas*, on the analogy of *Jovis* for *Djovis*, &c. It is clear, on the contrary, that *jam* is merely the locative of the stem *Ja*, and bears the same relation to *piam* that *ιάλλω* does to *φιάλλω*. It appears also as the dissyllable *ïam*.

Besides the combination *ἤδη* we have also the phrase *καὶ δὴ* as an expression of time; thus in Soph. *Ajax*, 49: *καὶ δὴ 'πὶ δισσοῖς ἦν στρατηρίδων πύλαις*, "he had just got to the gates of the two generals." Theocritus, v. 83: *τὰ δὲ Κάρνεα καὶ δὴ ἐφέρπει*, "the Carneia are just coming on." Whence the *Gloss. Paris. ad Arist. Plut.* 227: *καὶ δὴ ἤδη*. From this primary signification springs the use of *καὶ δὴ* in a sort of supposition, as in Eurip. *Med.* 386: *καὶ δὴ τεθνᾷσι*, "they are just now dead," i. e. "suppose them dead." Dem. in *Aphob.* p. 856, 16: *καὶ δὴ λέγει*, "suppose that he does say so."

As *δὴ* corresponds in meaning to *jam*, which is traceable ultimately to the same pronominal origin, we have exact equivalents also in *nun-c* and *νῦν*, *νυνί*. It has been already mentioned that *νν*, *νῦν* is an inferential particle, and that it derives this meaning from the sense of farness and progress (§ 192). The same explanation applies to *νῦν*, *nun-c* as particles of time; for it is felt that the present time is an advanced point, in comparison with any preceding time. Hence the best writers call present time *τὸ ἔπειτα*, "that which supervenes." For example, Sophocles, *Antig.* 605: *τό τ' ἔπειτα καὶ τὸ μέλλον καὶ τὸ πρὶν*, "the present, the future, and the past." Eurip. *Iph. T.* 1263: *τά τε πρῶτα τά τ' ἔπειθ' ὅσα τ' ἔμελλε τυχεῖν*, "the first, and the present, and all that was to happen."

In the temporal sense the element *δ-* appears also under the form *δῆν*, which generally signifies "long." The same word is found in Latin, under the lengthened form *dēnŭ*, which bears the same relation to *δῆν*, that *ἡνί*, *νυνί* do to *ἦν*, *νῦν*; and *denique* might be written *δηνίκα*, in conformity with *αἰτίκα*, *ἡνίκα*, *πηνίκα*, and *δπηνίκα*, though it appears from a comparison of the synonyms *τῆμος*, *demus* (*denum*), that *τηνί-κα* is the Greek form of *deni-que*, by a corruption similar to, but not so great as, that by which the enclitic *τε* has been formed from the regular stem of the second element. *Δέ*, *δέν*, *δή*, *δῆν*, are related just as *μέ*, *μέν*, *μή*, *μήν*; and it is singular enough that the last word of each set has the most direct reference to time, and the third words of each set are particularly opposed to one another, for *μή* expresses a doubt, and *δή*, confirmation. The opposition of *μέν*,

μέ, δέν, δέ, has been interfered with by causes to which we have before directly referred.

The first part of the compound ἤδη is the same as that of ἡμὲν, ἡδέ; also, we believe, as that of ἥμος, which has no immediate connexion with ἥμαρ, ἡμέρα. In the other compounds δή stands first. Of δήτις, and its connexion in meaning with δείς, we have already spoken: δήτα is of perfectly analogous formation: we may compare εἴτε, εἶτα; ἔπειτε, ἔπειτα; ἔνεκε, ἔνεκα, which fully explain the termination -τα. Δῆθεν is generally used in a sort of ironical signification (προσποίησιν ἀληθείας ἔχει, δύνανται δὲ ψεύδους, Suidas); this signification is also generally borne by θήν, which is obviously connected with θέν as μέν with μήν, and δέν with δήν. If we compare ἐνθα, ἐνταῦθα, εἴθε, δῆθα, with the words before us, we must be convinced that these terminations differ from the second syllable of δῆθεν only in the absorption or absence of the locative ending ν (above, § 114). That there is some sympathy between θ and γ appears from χθές compared with *hyas*, and that θα is in fact a representative of the second personal pronoun is clear from the forms οἷσ-θα, κλύ-θι, &c. The ironical use may be easily explained by the sense "only," which is nothing but a mark of position, and which seems to pervade the Greek as well as the Latin words into which this root enters: e. g. εἰ-θε, "I wish that" = "if only!" = "if in this particular." Compare the similar use of πῶς ἂν. The termination of μεταξε is the same as θε, θα: comp. Ζεύς with θεός. We may class δῆντε, δεῦτε, with ἦντε, εὔτε, and τρώνμα, τραῦμα. There is no need to suppose, with Apollonius and Hartung, that the first is a contraction of δή and αὔτε, although such compounds were common enough; take, for instance, *τηνικαῦτα* from *τηνίκα*.

The Latin set of words into which this root enters very often have *o* or *u* instead of the Greek ε, η. They use *donec* by the side of *denique*, *dum* with δῆν (*dum-taxat* involves a verb; see *Varronianus*, p. 231), and -*do* as a termination in *quan-do*, which may be compared with *tadā*, "then," *yadā*, "when," *kadā*, "when," in Sanscrit. The coincidence in meaning between the Greek and Latin appearances of this root is very striking: it is to be remarked, however, that in Latin it is very often placed after the word to which it immediately refers, while in the same case it precedes in Greek: thus δήτις answers exactly in meaning to *qui-dam*. In *tan-dem* and *deni-que* we see that this root may be placed before, as well as after, the syllable to which it refers, and that too in synonyms. Another word of the same signification is *demum*, which, according to Festus, was also written *demus* (comp. *rursum*, *rursus*), and which corresponds exactly to the Greek τῆμος opposed to ἥμος. The use of *i-dem*, *tanti-dem*, *toti-dem*, is just the same as that of αὐτὸς δή, ὅσον δή, οἷον δή, &c. in Greek. All the

meanings, therefore, of *δή*, *dem*, &c. may be deduced from the naturally intensive use of a word marking location with emphasis.

In negations of time the Greek enclitics *ποτε* and *πω* correspond in meaning to the Latin *-quam* and *-dum* respectively, and while *οὔποτε*, *nun-quam* mean "never," i. e. "at no time at all," whether past, present, or future (cf. *quis-quam* above, § 199), *οὔ-πω*, *non-dum* mean "not yet," i. e. "at no time up to the present," "at no present time," and we may also say *οὔπω ποτε*, "never yet," "never at any previous time." While *ποτε* has a complete family of correlatives (*τότε*, "then," *πότε*, "when?" *όποτε*, "whenever," *ποτε*, "at a certain time"), *πω* is used only after a negative, with the exception of one passage (*Æsch. Agam.* 1507: *πῶ*; scil. *ἐναίτιος εἶσύ*), where it is obviously a synonym of *πῶς*, and in the combination *πῶμαλα*, where it bears the same meaning with a little more emphasis. For *πῶμαλα* really signifies, "how can it possibly be so?" i. e. "it cannot be so at all," as the following passages will show. *Aristoph. Cocalus* ap. *Harpocrat.* s. v.: *α. λαιδορία τις ἐγένεθ' ὑμῖν; β. πῶμαλα οὐδ' εἶπον οὐδέν.* "A. Have you been quarrelling? B. Certainly not (how could it be so?). I did not even say a word." *Id. Plut.* 66: *Πλ. ὦ τάν, ἀπαλλάχθητον ἀπ' ἐμοῦ. Χρ. πῶμαλα.* "*Pl.* Depart from me. *Ch.* By no means (how can you expect it?)." So also in *Dem. Fals. Leg.* 357, and in the passage quoted by *Suidas* s. v. The grammarians, who rightly render *πῶμαλα* according to its ordinary use by *οὐδαμῶς*, adopt the statement of *Apollonius (Bekk. Anecd.* pp. 604, 622, 623) that *πῶ* is another form of *πόθεν*. This statement is combated by *Mr. Shilleto (ad Dem. de fals. leg.* p. 34), who, appealing to the Doric forms *αὐτῶ*, *τουτῶ*, &c., considers *πῶ* as a variety of *ποῖν*. But *πῶμαλα* belongs to Attic Greek, and while *πῶ* bears the same relation to *πῶς* that *οὔτω* does to *οὔτως*, the true theory of the cases shows that the adverbial ending *-ως* is really derived from an original *-οθεν* (below, §§ 247—249). With regard to the meaning, *Suidas* is clearly right in saying that *πῶμαλα* is *ἐντὶ τοῦ πόθεν—οἷον οὐδαμῶς*. For example, in the following passage we might substitute *πῶμαλα* or *οὐδαμῶς* for *πόθεν*; *Arist. Ran.* 1455: *Αἰ. τίσι χρῆται, πότερα τοῖς χρηστοῖς; Δι. πόθεν; μισεῖ κάκιστα.* "*Æsch.* Whom does the city employ? the good? *Bacch.* By no means—it hates them abominably." *Mr. Mitchell*, in his note on this passage, well remarks that *πόθεν* is like the French *comment*, a civil interrogative instead of a direct negative; and the same may be said of *πῶμαλα*.

A great many of the uses of *δή* correspond to those of *περ*, which we have explained before as a word signifying "thoroughly," "entirely," and thus it is that *καί περ* corresponds so exactly with *ἐμπας* (*ἐν πᾶσι*). The *m*, *v* or *ν*, which is found in words from this root

is the mark of the locative case. The form *-dē* which is found as a termination in Latin (*in-de*, *quam-de*) corresponds to *-θα* in *ἐνθα*, &c., and is another proof of the connexion of that termination with the root of the second personal pronoun.

203 If we compare *γε*, *γα*, with *κε*, *κα*, we must feel disposed to seek for some connexion between these forms; we shall now endeavour to establish by proofs our assertion, that such a connexion does in fact subsist. The Latin *quī-dem*, which corresponds to *γε*, or rather to *γε δή*, in almost every respect, and which is obviously a compound of the relative stem *qu(i)* and the *de*-stem which we have just discussed, proves that there is some affinity between the meanings of these concessive particles and that of the relative, which indeed might be shown directly, for *εἰ κε* and *siqua* are as nearly as possible equivalent to *εἰ γε* and *si quidem*. In fact, we believe that, in Attic Greek, *γε*, which was much more frequently used by the more modern than by the more ancient writers, actually stands as the successor and substitute of *κε*, which never appears in that dialect. In other languages of the Indo-Germanic family, the words which correspond to *γε* are manifestly connected with the relative and demonstrative stems. Thus in German we have *ja* as a synonym of *γε* in its common sense of "yes," by the side of *jener*, a synonym of *κεῖνος*, the connexion of which with *κε* has been before pointed out. We do not concur with Hartung in recognising the identity of *ἄρα* and the Sanscrit *saha* (I. p. 228); for the first syllable of the Greek word is not the collective but the intensive *ἄ*. The second syllable in the Sanscrit word is a pronominal root intimately connected with the relative, and is the same which appears in the first personal pronoun *a-ha-m*, which we have before explained: so that, in their existing state at least, *a-ha-m*, *ἐ-γω-ν*, and *ἄ-γα-ν* are only different forms of the same word. It is remarkable that in Sanscrit there is a particle *ह* which corresponds very nearly in its use to *γε*. That this is only another form of *ह* cannot be doubted, and thus we have an additional proof of the connexion of the relative with *γε*. We shall have further remarks to make on this particle *ह* when we come to the verbal-endings. Hartung's supposition (I. p. 352), that *-ζα* is a by-form of *ἄρα* and an older form of *γε* (p. 357), is not to be entertained; for we think we have shown pretty clearly that *ζα*- is only another form of *δια*. The Anglo-Saxon *gēa*, our "yea," is, like the German *ja*, another form of *γε*, and indeed a tolerably near approximation to it.

204 That the common inferential particle *πάρ* involves the same root as *πέ*, *πα*, is sufficiently obvious, and scholars have generally

endeavoured to explain it as a compound of $\gamma\epsilon$ and $\check{\alpha}\rho\alpha$, just as $\gamma\omicron\upsilon\nu$ is made up of $\gamma\epsilon$ and $\omicron\upsilon\nu$. We have before pointed out the meaning of the pronominal stem $\acute{\alpha}$ -, $\acute{\alpha}\nu$ - or $\nu\alpha$, signifying distance, removal, &c., and its use as a negative; also we have said generally that the termination $-\rho\alpha$ indicates motion, and is consequently joined to the third pronominal root $\tau\alpha$ -, to denote "beyond:" in which sense it is used as a comparative ending. As an ending with this sense we find not only $-\tau\epsilon-\rho\omicron\varsigma$, but also the simple $-\rho\omicron\varsigma$, and we have not only $\check{\alpha}\rho\alpha$, but also the simple $\acute{\rho}\alpha$. Thus we have $\pi\alpha-\rho\acute{\alpha}$ and *tva-ra* instead of *tara* in the fourth numeral. Similarly, in the older English writers, we have *where* as well as *whether*: e.g. "but where I be as true begot or no" (*King John*, Act I. Sc. 1). With our modern *where*, signifying merely the relation of place, we may contrast the Sanscrit *ku-tra*, and the Latin *trans*, *ul-tra*, &c., in which the stronger comparative ending is used without any immediate reference to the comparative degree. As a general rule we have the shorter form in *re*, *er* as the sign of the comparative in the Teutonic languages, so that *ra* may fairly be considered as a comparative suffix. For this reason also, as we have seen, words like $\lambda\nu\pi-\rho\omicron\varsigma$, $\mu\alpha\pi-\rho\omicron\varsigma$, which have a comparative meaning, throw off the termination when they assume the comparative ending $-\iota\omega\nu$. Thus too we have $\check{\alpha}-\rho\alpha = \check{\alpha}\nu-\rho\alpha$ as well as $\check{\alpha}-\tau\epsilon-\rho = \check{\alpha}\nu-\tau\epsilon\rho$. It is the merest trifling to say that $\acute{\rho}\alpha$ is a contraction of $\check{\alpha}\rho\alpha$; it is found in the oldest authors by itself, and has every right to be considered as ancient as the compound into which it enters. Nay, more; it is compared through its degrees $\acute{\rho}\acute{\alpha}\omicron\nu$, $\acute{\rho}\acute{\alpha}\sigma\tau\omicron\varsigma$, just like $\mu\acute{\alpha}\lambda\alpha$, $\mu\acute{\alpha}\lambda\lambda\omicron\nu$, $\mu\acute{\alpha}\lambda\iota\sigma\tau\alpha$. The words, in which it is found as a stem in the different Indo-Germanic languages, show at once that its meaning must be that which we have assigned to it. In Greek it is found in $\acute{\rho}\acute{\epsilon}\omega$, $\acute{\rho}\acute{\alpha}\delta\iota\omicron\varsigma$, $\acute{\rho}\acute{\epsilon}\pi\omega$, &c., in Latin in *rapio*, *rapidus*, prefix *re**, &c., in the old Norse *ras*, Anglo-Saxon *raes*, Swedish *rasa*, German *rasch*, *rauschen*. The difference in meaning between $\check{\alpha}\rho\alpha$ and $\acute{\rho}\alpha$ appears to us to be merely this, that in the former the notion of farness is combined with that of motion, in much the same way, though more emphatically, than in the comparative ending $-\tau\epsilon\rho\omicron\varsigma$, while in $\acute{\rho}\alpha$ the idea of motion, proceeding, &c. remains alone. It is for this reason that $\acute{\rho}\alpha$ is never employed to express a direct inference, i. e. a going farther in reference to, and in consequence of what has gone before, which is

* It is worthy of observation that *re*-, which corresponds to $\acute{\alpha}\nu\alpha$ - in some of its uses as a prefix, exhibits a singular interchange of meaning in the later as contrasted with the earlier Latinity. Thus while one word, "re-veal," gives us the classical value of *re-velo*, our "re-cluse" gives us the later, as opposed to the classical signification of *re-chudo*. See Casaubon's note on Suetonius, *August*. c. 78.

the common use of ἄρα. We have before mentioned the intimate relationship of the negative and inferential particles. It arises, as before stated, from the idea of distance implied in the former. Another form of ἀνά, namely, ἄνευ (Æolic ἄνυς), is used as a synonym of ἄ-τε-ρ, which, as we have just remarked, is only a stronger form of ἄ-ρα. If we are right in our conclusion that ἄ-τε-ρ was originally ἄν-τε-ρ, it must be the same preposition as the Sanscrit *an-tar*, Latin *in-ter* (above, § 170), German *un-ter**, and thus ἄ(ν)τε-ρ will bear the same relation to ἀντί that πρότερος does to προτί. That the ideas of distance, separation, and evanescence, are cognate, is sufficiently obvious. Compare, however, the uses of the Latin prefix *se* = *sed* and *sine*; and for the affinity of *inter* and *unter*, "under," we have the cognate significations of *inter-ficio* and *pessum-do*, and of *inter-eo* and *per-eo*. To say of anything that it goes, or is made to go, *through* or *between* in a downward direction, or that it vanishes through the floor, is a very simple description of its being destroyed or made away with. In a similar manner, a slight modification of the second syllable of ἄνευ, namely, νύ, νύν, is used as a synonym of ἄρα, i. e. in an inferential sense, just as *nam*, *nempe* = *namque*, are used in Latin. The use of the second syllable of ἀ-νά, under the lengthened form of νή, ναί, as a strong affirmative particle, corresponds to the similar use of δή, δαί, just as the strong form of νύ, νύν, i. e. νῦν corresponds to δή when that particle is used to mark a point of time.

205 The hypothetical particle εἰ is intimately connected in meaning with the relative. The meaning "if" = "in which" would at once lead us to imagine a connexion between the relative and demonstrative and the "if;" and there is at least one Homeric usage, in which εἰ appears as the relative particle of time. This is the phrase εἰ ποτ' ἔην or εἰ ποτ' ἔην γε, which occurs in the four following passages. *Il.* III. 180: δαῖς ἀντ' ἑμὸς ἔσκε κυνώπιος, εἰ ποτ' ἔην γε, "he (i. e. Agamemnon, who is before her eyes) was my brother-in-law, shameless woman that I am, at least when he was so (for he is so no longer)." *Ib.* XI. 762; ὥς ἔον, εἰ ποτ' ἔην γε μετ' ἀνδράσιν, "such was I, when I was engaged among warriors," which his extreme old age prevented at the time when he was speaking. *Od.* XV. 268: πατήρ δέ μοι ἔστιν Ὀδυσσεύς, εἰ ποτ' ἔην· νῦν δ' ἤδη ἀπέφθιτο λυγρῷ ὀλέθρῳ, "my father is (was) Ulysses, when he formerly existed, but now he is dead." *Ib.* XIX. 315: οἷός γ' Ὀδυσσεύς ἔσκε μετ' ἀνδράσιν, εἰ ποτ' ἔην γε, "such

*This view is farther supported by the Behistun *atar* for *inter*; see Rawlinson, *As. Soc.* XI. I, p. 4.

as Ulysses was among men, when he formerly existed." The context in each case shows that there is no condition, least of all such a condition as would be expressed by the past tense of the indicative*. So that we have merely an emphatic and mournful reference to that which no longer exists, as in the singular passage at the end of the *Ajax* of Sophocles: *Ἄλαντος ὅτ' ἦν τότε φωνῶ*. But although we recognise this temporal meaning in *εἰ*, we do not with Bopp (*Gloss. Sanscr.* p. 275) imagine an original form *ἐδι*; still less with Pott do we suppose that the Sanscrit *ya-di* involves the root of *div-a*, *dies*. The use of clearly demonstrative or relative words in the Indo-Germanic languages, as hypothetical particles, is an additional proof that *εἰ* must be a case of the pronoun *ἵ*. This etymological fact is proved by a comparison of the Sanscrit *ya-di*, "if," *ya-di-vā*, "or" (*si-ve*), with *yat* = *quod*, *ya-tas* = *ὅθεν*, *ya-dā* = *ὅτε*: also by the Gothic *ja-bai*, Frisic *jef*, Anglo-Saxon *gif*, Old German *i-bu*, *ubi*, Lettish *ja*, Finnish *yos*, all signifying "if" = "in which or in that case or supposition." The termination *bai*, appears to be the same as the Latin *bi*, Greek *-φι*, both locative endings (*Quarterly Review*, Vol. LVII. p. 105). It is an important principle of syntax that the conditional clause or protasis is a relative sentence, the antecedent, when expressed, being the particle *ἄν* in the apodosis (above, § 186; *Greek Grammar*, articles 392, 501); and we thus see that the etymological result corresponds exactly to the syntactical or logical deduction.

The only difficulty is occasioned by the appearance of the form *αἰ*, as an equally old particle with *εἰ*. We might be inclined to suppose, from a comparison of the Æolic forms *καίνω*, *φθαίρω*, with the common forms *κτείνω*, *φθείρω*, that the difference is merely a dialectical one; but the forms *καίνω*, &c., seem to have arisen from an insufficient perception for the finer shades of vocalization, which requires that in heavy forms like these the lightest vowel should be employed, whereas *αἰ* seems to be a really stronger and less degenerated form than *εἰ*. That there is some difference between *εἰ* and *αἰ*, farther appears from the fact, that Homer uses both forms, and with a slight but decided difference of meaning, *αἰ* being used principally in connexion with *γάρ*, *κέ*, and *θε*, and not by itself as a mere ordinary hypothetical particle. In the Bœotian dialect, we find, singularly enough, that not only is *η* occasionally written *ει*, as in *ὀνέθεικε* for *ὀνέθηκε*, *μεῖ* for *μή*, *ἐπιδεῖ* for *ἐπειδή*, &c. (Böckh, *Corpus Inscript.* I. p. 720), but also conversely, *εἰ* is written *η*, as in *ἡ δέ κα' τις* [*πράτ*] *τη* *τὸ*

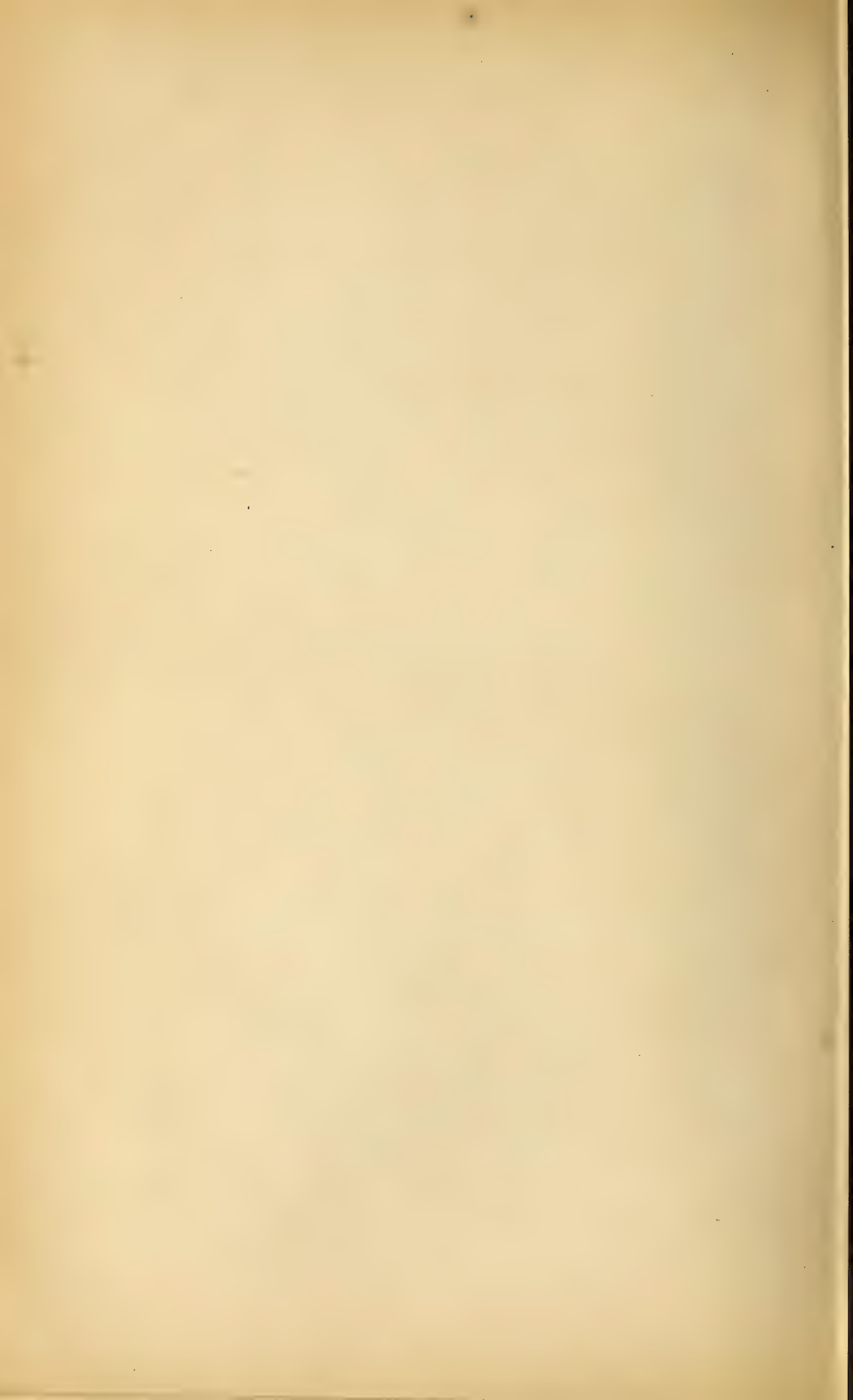
* The rendering *si quidem olim fuit* suggested by Nägelsbach, *Anmerk. z. Ilias*, Nürnberg. 1850, p. 240, seems not to explain the phrase either completely or accurately.

ἐννόμιον Εὐβωλον (Böckh, *Corp. Inscript.* i. p. 741, No. 1569, l. 48); moreover, *η* is also a representative of *αι* (Böckh, *Corp. Inscript.* i. p. 722), so that no argument for the difference can be derived from this dialect. If, however, we may read βαίκα, ἐάν Κρητες*, for the gloss βαῖκαν, Κρητες, in Hesychius (see Kön, *ad Greg. Cor.* p. 114), and compare the old Latin form *suæ*, = σ Φ αι (*suæ pis* = *siquis*; Müller, *Etrusker*, Vol. i. p. 31, note 62) with the other Latin forms *si*, *se*, *sei*, we may perhaps be disposed to conclude that the form αἰ is derived more from the stronger form of the second element *φα*, εἰ from the mutilated form ζ, which, however, is ultimately traceable to the same origin. This will account for the more common union of αἰ with relative particles in Homer, though, as we have seen, the weaker form εἰ occasionally exerts an attractive influence on κέν, and even on ἄν.

* This reading is due to Heringa (ap. Valcken. *ad Herod.* 350, 21). Is. Voss conjectures that the true reading is βαῖκαν, αἶγα, and this reading is adopted by Meineke. On the corrupted forms αἶγαν, χεῖραν &c., see Lobeck, *Paralipom.* p. 142.

BOOK III.

THE NOUN.



THE
NEW CRATYLUS.

BOOK III.

THE NOUN.

CHAPTER I.

THE ROOTS OF NOUNS AND VERBS.

206 Definition of a root. 207 The roots of words did not exist separately and before the words in which they are found. 208 Quasi-monosyllabic roots are really compounds. 209 The same remark is applicable to the trilateral roots of the Semitic family. 210 Internal modifications of Indo-Germanic roots. 211 I. Reduplication. 212 II. Prefixes consisting of single letters. 213 Some of these are prepositions. 214 III. Assimilation. 215 (1) Assimilation proper and absorption. 216 (2) Substitution of σσ or ζ for a consonant and ι. 217 (3) Introduction or interpolation of symphonic consonants. 218 Digression respecting ἀμβλύς and κατηρτυκός. 219 (4) Affections of the final consonant of the root. 220 Arbitrary duplications of liquids. 221 Dissimilation and metathesis. 222 IV. Vowel changes. (1) Weight of vowels. 223 (2) Adscititious vocalization. 224 Significance of roots. 225 Metaphysical and historical differences. 226 Dissection of words, in order to arrive at the root.

206 **I**N a language which, like the Greek, admits of inflexion and composition without limit, we find in every word that expresses a conception, whether it be a noun or a verb, some prefix, suffix, or both, common to it and to a great number of other words, from which it essentially differs in meaning; and, when these adjuncts are removed, there generally remains, if the word be not a compound, some single syllable which constitutes its meaning, and which again, with occasional slight modifications, runs through another set of words, differing from the one in question in prefix, suffix, or both, but agreeing with

it in the fundamental signification. This ultimate element we call the *root*, or, if we may be permitted to borrow the terminology of mathematical analysis, and apply it to philology, we may say that every word is a *function*, the root being the *independent variable*, and the prefixes and suffixes the *constants*.

207 When we talk of the roots of words, we do not mean to say that words are derived from them, or that they ever existed separately*. If we did we must fall into the absurdity of deriving all languages from a few primitive syllables, an absurdity for which Murray has been so justly derided. Like the common parts in things generically the same, they are created by our powers of abstraction and generalization, they have only a subjective existence, and to speak otherwise of them would be the excess of realism. Everything is conceived as existing or happening in space or time, and therefore, as has been shown, the element indicating the conception must always have, subjoined to it, some element denoting position, that is, at least one pronominal stem, before it can be considered as a word. That any hypothesis of the separate and primary existence of roots must lead to the merest trifling, is clear from the absurdities into which Lennep and Scheide have fallen, in their attempt to carry out Hemsterhuis's principle, that the primitive verbs consisted of two or three letters, from which the complete words, as we have them, were formed. It is, of course, of the utmost importance that we should analyze and compare words, so as to arrive at their primary elements, just as it is necessary that the philosopher should seek for the real definition; but there is no more truth in saying that the bare roots, which form the materials of inflected language, ever existed separately, than there would be in asserting that the world was once peopled with *αὐτοέκαστα*, whose fossile remains, forsooth, the geologers have as yet failed to discover.

* The subject of roots has been very ably discussed by Pott in his review of Benfey's *Wurzellexikon* (*Jahrbücher f. Wissensch. Kritik*, 1840, pp. 623 sqq.). He says with great truth (p. 631) that a root is only a figurative expression, and that it is merely the germ of a family of words, without being a word itself.

When we thus deny the separate existence of roots, it may be objected to us, that some languages, the Chinese for instance, are entirely made up of naked roots. But then it must be recollected, that these roots are mutilated words which have in all probability lost their original inflexions, and that we are not speaking of tertiary idioms in which there is no such thing as flexion or etymology, but of perfect languages like those of the Indo-Germanic family, which are based upon monosyllabic roots, adapted for composition, and only appearing in connexion with at least some one pronominal element*.

208 Many syllables terminating with a consonant are called roots of Indo-Germanic words. It must be recollected, however, that no consonant can be pronounced without a vowel, and that every such final consonant of a root was originally a distinct syllable; so that all roots terminating in consonants must be considered as dissyllabic, and, therefore, as compound roots. In such compounds not only is the second vowel suppressed, but also, in some cases, the first, and thus too there are apparently monosyllabic roots ending in a vowel, which are nevertheless dissyllabic (see Lepsius, *Paläographie*, p. 65). An instance to the point is furnished by the root $\kappa\tau\epsilon$ -, the first vowel of which is never inserted in Greek, though it appears distinctly enough in the Semitic synonyms כַּט , קט , قط , قطل , قطب , &c. When the second consonant is a liquid, nothing is more common than the metathesis of the vowel, according to the principle mentioned above (§ 107). We have an example in the root $\gamma\epsilon\nu$ -, which sometimes appears as $\gamma\nu\epsilon$ -: compare $\xi\text{-}\gamma\epsilon\nu\text{-}\acute{o}\text{-}\mu\eta\nu$, $\gamma\acute{\iota}\text{-}\gamma\nu\omicron\mu\alpha\iota$; *genitus*, *gigno*; and the Sanscrit *jan*, *jānati*. In the form $\gamma\alpha$ - of $\gamma\acute{\epsilon}\text{-}\gamma\alpha\alpha$, &c. the ν has evanesced, according to the common practice (above, § 114). It will be understood, then, that when we call $\delta\alpha\kappa$ - the root of $\delta\acute{\alpha}\kappa\text{-}\nu\text{-}\omega$, $\tau\nu\pi$ - of $\tau\acute{\upsilon}\pi\text{-}\tau\text{-}\omega$, $\varphi\upsilon\gamma$ - of $\varphi\acute{\epsilon}\gamma\omega$, $\pi\rho\alpha\gamma$ - of $\pi\rho\acute{\alpha}\sigma\sigma\omega$, $\kappa\tau\epsilon$ - of $\kappa\tau\acute{\epsilon}\lambda\iota\nu\omega$, &c., we are

* It is right to mention that, while the true theory, as we consider it, has been carried too far by Bopp, other modern philologists have endeavoured to find a philosophical foundation for what is in fact a reproduction of the antiquated hypothesis (see for example Bunsen, *Brit. Assoc.* 1847, p. 293).

not speaking of the ultimate element of these words, but of that root, which, though a secondary one, forms the base of a large class of words, and of which the real ultimate elements are not known or not taken into the account. It is these quasi-monosyllabic roots which it is so difficult to recognise in consequence of the changes which the terminations produce upon them.

209 It is usual to speak of the trilateral elements of the Semitic languages as roots or ultimate forms of words. On this subject we have only to repeat what we have elsewhere had occasion to state (*Maskil le Sopher*, pp. 36 sq.), namely, that if, assuming, as a general view of all languages entitles us to assume, that the languages of the Semitic tribes were originally endued with a living power of flexion from single significant utterances, we were to inquire what process of mutilation would most naturally ensue from the early use of writing, and those ethnical admixtures to which we have adverted in a former chapter (§ 49), we could hardly imagine any other state of things than that which is exhibited by the Hebrew language. We observe here a regular preference for words of a certain length, and we must suppose that this craving after a symmetry of rhythm could only have arisen, when the gradual loss of a living etymology had reduced compounds and derivative forms of words to the mere units or terms of a logical proposition. Under these circumstances, it is probable that euphony would take the place of any previous feeling for the significance of the constituent parts of a word; and in the pollarding process, which was gradually introduced, the parts omitted were often at least as significant as those which were retained; for when the etymological value of a language is at a discount, all syllables are alike except so far as they minister to or oppose a conventional euphony. To the same obtuseness of etymological discrimination we must attribute another phenomenon, which is very observable in the Hebrew language, namely, that different meanings of the same word, from being at first indicated by mere modifications of sound, are ultimately represented by different words. The same euphony, however, which leads to the mutilation of more complex words, also obliges us, in certain cases, to elongate, or otherwise make the most of simple crude-forms; and thus it happens that the

Hebrew language often preserves the truest and fullest forms of certain important roots, or quasi-roots, which it has in common with the Indo-Germanic idioms. We will give a few examples of these linguistic phenomena, which are very instructive with reference to our immediate object. (a) We should not at first sight recognise the identity of לָמַד and μανθάνω , but it is demonstrable. In its *pi'hel*, or causative form, לִמַּד , the Hebrew verb signifies "to teach," or "to cause learning to pass on to another;" but this leaves the inference, that in its primary use it signified "to learn." Supposing, then, that the first syllable is the preposition $\text{ל} = \text{ἀνά}$, the extensive use of which we have already mentioned, the monosyllabic root of the verb is לָמַד , which is found with the same meaning in μαθ-εῖν , μῆδ-ομαι , μῆδος , μῆτις , προμηθεύς , &c., in the Latin *med-itari*, and in the Sanscrit *mêdhâ*. In the word לָקַח , "he took," which we at once identify with the Greek λαχ-εῖν , euphony has called into play the *residuum* of some pronominal adjunct, analogous to that which supports the conjugation of λα-γ-χά-νω , and in some of the forms, *e. g.* the imperat. קַח , this affix is retained at the expense of the radical ל . If we compare γδοῦπος with δοῦπος , κτύπος with τύπτω , κροῦνος with έξω , &c., we shall probably recognise in these prefixes a remnant of the preposition ἐκ or ἐξ . The same may have been the case with לָבַד , "great," compared with δολιχός , Russian *dolgye*, &c.; but the Hebrew euphony employs the prefix as equally significant with the root of the word. Again, the very common verb נָתַן , "he gave," must be considered as a compound of the preposition $\text{נ} = \text{ב}$ and the root נָתַן found with an affix in the synonym נָתַתּוּ , "porrexit," and in the Indo-Germanic τείνω , τανύω , *teneo*, *tendo*, Sanscrit *tanômi*, German *dehnen*, which again are formatives from a root τα- still found in Greek. The imperative נָתַן exhibits the simpler root without any prefix, and the construct-infinitive נָתַתּוּ entirely disguises the common or elongated form of the Hebrew verb. In פָּלַח we have the same root as in *fallo*, "fall," but, as in the Greek σ-φάλλω , the prefix is inseparably connected with the root. The same remark applies to פָּרַח , פָּרַח , which may be compared with φη-μί , *fari*, *fatum*, *vates*, προ-φήτης . In פָּרַח , פָּרַח , and פָּרַח , we have the same root פָּרַח , which is also found in the Latin *quaterere*, the German

quetschen, and in our *quash*, *s-quash*, *s-queueze*. The prepositional affixes, of which the first and third must be considered as identical, modify very slightly the signification of the compounds, and yet, according to the Jewish grammarians, they are three separate roots. (b) This brings us to the second class of phenomena. An example of this is furnished by the root *vid-*, which, in Latin, denotes "to divide" and "separate" (as in *di-vido*, *idus*, *vid-uus*); hence "to distinguish" or "to see" (*video*). We have the latter sense in the Greek *ιδεῖν*=*Fiðeîn*, and an extension to the sense "to know" in *οἶδα*. Now in Hebrew we have *בָּרַל*, "he divided," and by the side of this the entirely distinct word *יָדָע*, "he knew," containing the same root slightly disguised. Then, again, there can be no doubt that the important verb *יָשַׁע*, "he was open and unconfined," contains the same root as *פָּתַח*, "he opened," and *פָּתַח*, "hollow," *κοῖλος*. And we must suppose that *רָאָה*, "he saw" (*δ-ράω*), is really connected with *רָאָה*, "he looked after a flock of sheep, went about with them, and tended them," the more immediate analysis of which leads us to *רָע* (cf. *erro*, *ἔρρεν*, and the roots *ῥα* or *ῥεF*); and we find a further transition in *דָּרַךְ*, "a road" (*Maskil le Sophér*, p. 40). (c) The cases in which the Hebrew euphony has preserved the fullest forms of Indo-Germanic roots or quasi-roots, are very numerous. A few specimens must suffice. By the side of *καλέω*, *κέλομαι*, *κλεύω*, *κλύω*, *κλέφος*, &c., *calare*, *cliens*, *in-clytus*, &c., we have the Hebrew *קָלַח* or *קָלַח*, which shows us that the initial must have been originally a compound of guttural and labial—in fact, the sound *f* or *q*. The same inference might, perhaps, be derived from the Anglo-Saxon *gyllan* and our *yell*: and we are thus enabled to pass on to the connexion between *קָרַח*, *κρά-ζω*, *κηρύσσω*, *γῆρυς*, &c. Again, we have probably the more original initial in *קָרַח*, compared with *κέρως*=*κέρων-τ* (above, § 114), for this *q* sound is necessary to explain the *o* in *cornu*, *horn* (Goth. *haurns*): see *Varron*. p. 250. The Latin *p-recor*, the German *f-ragen*, Sanscrit *p-rich-çhâmi*, &c. exhibit the *p-r* in close proximity, while *rogo* omits the labial, and *posco* for *proc-sco* nearly annihilates the root-syllable; but the Hebrew *קָרַח* exhibits the root *rek* or *reg-* with its prepositional prefix complete, and carries us at once to the original idea of the word, namely,

approach and supplication (cf. *ἰκέ-της*). From these examples, which might be multiplied to any extent, we see, on the one hand, that Hebrew words might be reduced to monosyllabic roots, like those which form the basis of the Indo-Germanic languages*; and, on the other hand, we observe that if the quasi-monosyllabic roots of our family were liable to the same extensions which we see in the Semitic languages, we should recognise the fact, that they are compounds, and should seek their explanation in a further analysis of the elements of which they are composed.

210 Although therefore the distinction between the Indo-Germanic and Semitic languages consists principally in the fixity of the compound crude-form, and the more frequent internal modifications to which it is liable, in the latter family, yet we must not suppose that the roots in the Indo-Germanic languages are always simple and incapable of internal modification. Every root consists either of a vowel, or of at least one consonant and a vowel. Now if we alter the consonant or consonants we alter the root, as far as its immediate identity is concerned, for we are not speaking here of cognate roots as *li* and *ri*; but the vowel of a root containing consonants admits of many modifications, and even when the vowel constitutes the whole root, it is liable to a few regular changes. The reason is, that the vowel is merely a voice or sound produced by a greater or less opening of the mouth, and entirely dependent on the consonant or breathing which it articulates, whereas the consonants are all produced by distinct intentional motions of the tongue or lips, or both, and therefore constitute the intended meaning of the word. The difference between composition with constant prefixes and suffixes, and modification of the root, between the external and internal modifications of the significant element, consists in this, that the former being pronominal

* The existence of monosyllabic roots in the Hebrew language has long been maintained: see Adelung, *Mithridates*, 1. pp. 301, 2; Klaproth, in the Baron de Merian's *Principes de l'étude comparative des Langues*, pp. 212 sqq.; Fuerst, as explained by Delitzsch, *Jesurun*, Grimmæ, 1838; and others.

additions can only affect the expression of local relations of the thing intended, whereas the latter expresses a modification of the thing itself. As the roots in the Indo-Germanic languages are ultimately monosyllabic, the internal modification must of course be of less frequent occurrence and less various than the external.

The changes which it will be proper to notice in this chapter are, (I) reduplication of the radical consonant, or, in some cases, of the whole or greater part of the root; (II) prefixes consisting of single letters; (III) in the case of quasi-roots, or roots ending with a consonant, assimilation produced by contact with the pronominal part of the word; (IV) modification of the root-vowel.

211 (I) Between the roots of nouns and verbs as such, there is no essential difference. The verb and noun are distinguished by the constant pronominal endings which are attached to each, and occasionally by the manner in which these endings are connected with the root. Reduplication, however, takes place in the verb much more frequently than in the noun, and with reason, for the intention of the reduplication is to convey an idea of repeated action, which is of course more frequently applicable to a verb than to a noun. It will be understood that the reduplication, of which we speak here, is essentially different from that which we have pointed out in the pronominal word designating the number "six." In that case the pronominal word, denoting position, and as such representing a certain number, signifies, when repeated or written twice, the double of that number, just as the word thus reduplicated itself consists of two pronominal words, each representing a number. But the reduplication of the root is merely an internal modification, intended to enable the sense to dwell longer on the word, and as such does not differ in kind from the *guna* or *anusvâra*, of which we shall speak in this chapter.

212 (II) Many roots in the different Indo-Germanic languages have occasionally single letters prefixed, which do not belong to the root, for it generally appears without them, so that even when these letters are vowels we are not to conclude against the assertion that all proper roots are monosyllabic. The following are some instances (see *Quarterly Review*, LVII. p. 107).

1 $\check{a} = \check{e} = \check{o}$ prefixed.

$\check{a}$ -βληχρός { βληχρός, βλάξ
μαλακός

ἀ-μανρός	μανρός
ἀμέλω	{ Latin <i>mulgeo</i> Germ. <i>melken</i> Eng. <i>milk</i>
ἀ-νήρ (Φα-νήρ)	{ Old Lat. <i>nero</i> Sansc. <i>narah</i> Zend <i>nairya</i>
ἄ-ποινα	ποίη
ἄ-σπάραγος	σπαργή, σφριγῶ
ἄ-λείφω	λίπα
a-perio	porta
ἄ-στήρ (High German) <i>ge-stirn</i> }	{ Latin <i>stella</i> (for <i>sterula</i>) Zend <i>stero</i> Eng. <i>star</i>
ἐ-κεῖνος	κεῖνος
ἐ-λεύθερος	{ λαός Germ. <i>leute</i> Slav. <i>liudi</i> Anglo-Saxon <i>leod</i>
ἐμέ, ἐμοί	Lat. <i>me, mihi</i>
ἐ-ρυθρός	{ Eng. <i>ruddy</i> Lithuan. <i>ruddus</i> Lat. <i>ruber, rufus</i>
Sanscrit <i>k-ship</i> }	
ἐ-ρείπειν	ρίπτειν
ἐ-ρετμός	Lat. <i>re-mus</i>
ἐ-νεροι	νέροθε
ἐ-ρεύγω	Lat. <i>ructo</i>
ἐ-λάννω	<i>lâmina</i>
ἐ-λαχύς	Sansc. <i>laghus</i>
ἐ-ρέφω	Eng. <i>roof</i>
ὅ-βριμος	βριθός
ὅ-φρύς	Sansc. <i>bhrûs</i>
ὀ-δούς (ὀ-δόντες)	{ Lat. <i>dens</i> Sansc. <i>dantas</i>
ὀ-βελος	βέλος
ὀ-δάξ	δάκ-νω
ὀ-νομα	{ Lat. <i>nomen</i> Sansc. <i>nâman</i>
ὀ-τλος	τλήμι
ὀ-ρέγω	Lat. <i>rego</i>
ὀ-νύξ	{ Sansc. <i>nakha</i> Germ. <i>nagel</i>

ὄ-νειδος	Sanc. <i>nid</i> , "to despise"
ὄ-κρουεῖς	κρούος

2 Labials.

Eng. <i>b-reak</i>	}	ῥήγ-νυ-μι
Icel. <i>b-raka</i>		
Lat. <i>f-ra-n-go</i>		
Eng. <i>b-road</i>	}	Lat. <i>latus</i>
Germ. <i>b-reit</i>		
Greek <i>π-λατύς</i>		
Germ. <i>f-ragen</i>	}	Lat. <i>rogo</i>
Lat. <i>p-recor</i>		
Sansc. <i>p-rach'h</i>		
Lat. <i>f-luo</i>	}	Lat. <i>luo</i>
<i>p-luo</i>		
Lat. <i>p-iscis</i>	}	Gaelic <i>iasg</i>
Welsh <i>p-ysg</i>		

3 Dentals.

τ-ρίβειν	}	Germ. <i>reiben</i> Eng. <i>rub</i>
δ-άκρυ		
(<i>l-acryma</i>)	}	Sansc. <i>acru</i> Lithuan. <i>aszara</i>
δ-ρόσος		
δ-ρέπω	}	Lat. <i>ros</i> Sansc. <i>rasa</i>
δ-έρ-κω		
Sansc. <i>d-riças</i>	}	-λικός

4 Gutturals.

<i>g-lad</i>	Lat. <i>lætus</i>
High. Germ. <i>ge-stirn</i> . . .	{ Eng. <i>star</i> Zend <i>stero</i>
γ-λήνη	
γ-λαυκός	{ λάω λευκός
γ-λαύσσω	
γ-λά(κτ)	{ lac(t)
γ-λάγος	
(ἀ-μέλγω=ἀ-μλάγ-ω)	
Sansc. <i>k-am</i>	Lat. <i>amo</i>
κ-λυτός	<i>loud</i>
Lat. <i>g-lubo</i>	Lettish <i>lobit</i>
Sansc. <i>g-rabh</i>	{ Lat. <i>rapio</i>
Icel. <i>g-ripa</i>	

Yorkshire dialect *c-lubstart* Norfolk dialect *lobster*

(=*clubtail*, a name for the stoat)

κ-νίσσα	nidor
χ-λιαρός	λιαρός
χ-λαῖνα	læna
g-raf	reeve
C-lanius	Ital. <i>Lagno</i>
H-lodwig	<i>Ludwig</i>
k-nut	Lat. <i>nodus</i>
κ-άπρος	{ Lat. <i>aper</i> Germ. <i>eber</i>

5 s.

σ-κέπαρον(σ.κέπαρ- νον, Od. v. 237)	} . . κόπτω
σ-κάπτω	
σ-τέλλειν	τέλλειν
σ-τολή	ἀνα-τολή
Lat. <i>sorbeo</i>	} ῥοφέω
Lith. <i>s-reb-ju</i>	
σ-τένω	τείνω (δύς-τηνος?)
σ-κάμανδρος	κάμανδρος
σ-κεδάννυμι	{ κεδάννυμι κεάζω cut
s-mash	mash
s-lash, s-p-lash	lash
s-pike	pike
s-coop	cooper
s-plendidus	{ plenus (comp. <i>candidus</i> with canus)
s-ponte	pondus
s-squeeze	quetschen

213 In many of the vowel protheses it is easy to see that they correspond to the elements of prepositions. Thus in ἀ-μέργειν, ὁ-μόρ-γνυμι, ἀ-μάω, ἀ-μέρδειν, ἀ-μείβειν (= ἀμεύειν, ἀμεύσασθαι, Pindar, *Pyth.* i. 45; Hesych. s. v. ἀμενσίπορος; Pind. *Pyth.* xi. 38; α-moveo), ἀ-μαρύσσειν (= ἀπο-στίλβειν, comp. μαρ-μαρ-ύ-γη), ἄ-ποινα, ἄ-σχος, ἀ-σπί(δ)ς (comp. σκύτος), &c., the prothesis is obviously the first part of the preposition ἀ-πό, or the pronominal element να, which, we have seen, is frequently used to express removal, distance, and, by inference, negation. The prefix seems rather to bear the meaning of the compound ἀ-νά in ἀ-σπάραγος ("that which sprouts up"), ἄ-σταχυς, ἀ-λείφω (comp. ἀναμάσσω), ὄ-φρος, &c. And we have clearly ὁ- for ἀνά in

ὁ-σκάπτω, ὅ-στασαν, ὁ-σταθείς, ὁ-μνάσθην (Ahrens, *de dial. Æol.* pp. 77, 149). The same is probably the true explanation of ὁ-πυῖω, compared with πυῖω, φύω, *fac-io, fi-o, ποι-έω, πῶῦ, ποι-μῆν, pu-er, pu-bes*, Sanscr. *pu-trā*, &c. In *Φα-νήρ*, as it was written in Homer, we have the older and fuller form *va* of the element *a*, which, as we have before suggested, is probably in this case a mutilation of the second pronominal stem. The initial *a* has a collective meaning, or stands for *sa*, in ἁ-σπάζομαι, ἁ-κόλουθος, &c. But many of the vowels, and most of the gutturals and sibilants thus prefixed, are only added for the sake of euphony. Indeed this appears to be invariably the case with the short *e* prefixed to a word beginning with *s* and a consonant, as in a great number of French words; *e-space*=*spatium*, *e-sprit*=*spiritus*, *e-stomac*=*stomachus*, *é-cuyer*, old French *escuyer*, Ital. *scudiero*, Latin *scutiger scutarius*, in English both *Esquire* and *Squire**. In the same way Bartolomeo della *Scala*, of Verona, becomes Prince *Escalus* in *Romeo and Juliet*. In this country we have a habit of prefixing such a vowel in pronunciation, whether we prefix it in writing or not. Thus many people pronounce *Xerxes* as if it were written *Exerxes*, and the people of Asia Minor, and others to whom the Persian was a foreign language, seem to have been driven to the same use of a prothesis in articulating the designation of the provincial governors. The word *σατραπήτης*, defined by Herodotus (i. 192) as ἡ ἀρχὴ τῆς χώρας, and explained by Xenophon's mention of the *σατράπας οἵτινες ἄρξουσιν τῶν ἐνοικούντων* (*Cyr.* viii. 6, § 3), is obviously explicable from the Sanscrit *kshêtra-m*, "a field," and *pâ*, "to rule." Now in an inscription found in Asia Minor we have *ἐξαθραπεύειν*, or *ἐξασατραπεύειν*, for *σατραπεύειν*, (Böckh, *C. I.* ii. pp. 470, 583). Theopompus (Phot. *Cod.* clxxvi. pp. 120, 24) gave the name *σατράπης* as *ἐξαστράπης*; and Scaliger (*ad Euseb.* nr. mdcxi) conjectured, from the form in *Esther* ix. 3; *Esr.* viii. 836, that the foreign pronunciation of the word was often Ἀξαστράπης. This is obviously the result of a pronunciation of the initial *X* similar to that of which we have been speaking in the case of *Xerxes*. It might be supposed that we have another example of the same kind in Ὀξάθρης; but here we can revert to the obvious analysis of Ὀράνης (above, § 160), and explain the name as compounded of the old Persian 'u, Zend *hu*=*εὗ* and *kshatra*, "a warrior" or "chieftain." We recognise the same prefix, under a weakened form, in Ἀζάνης (Herod. vii. 66) compared with the name *Ozines* (Curtius, ix. 41, § 19); and also in *Omartes* (Athen. 575 B) compared with the ethnic name *Amardi* borne by tribes on the Caspian Sea (Strabo, pp. 507, 508, 514), on the north

* Similarly we have *i* before *s* and another consonant in Latin MSS. and later inscriptions; see Lachmann *ad Lucret.* iv. 283; Corssen, *Ausspr.* d. *Lat. Spr.* i. p. 289.

side of Taurus (Id. p. 510). in northern Media (Id. p. 523), and in Persia, where they were also called *Mardi* (Id. pp. 523, 4). This last word probably signifies "a man" (*vir*) or "a warrior" (Zend *mereto*, Old Persian *martiya*), and is a proper name not only in the adjectival forms *Mardon* (Æsch. *Pers.* 51), *Mardonius* (*Marduniya*, i. e. virilis, strenuus), *Mardontes* (*Mardavanta*), but also with the prefix *ârya*, "noble," in *Ariomardus* (Æsch. *Pers.* 38, 323). This ethnical name is interesting as showing the same tendency to the general assumption of a warlike character among the Persian tribes in the East, that we have remarked in their kindred the *Ger-mans* and *Her-min-ones*, compared with the Persian *Γερμάνιοι* (above, §§ 76, 85), and it is a significant fact that *Umartiyâ*, *Εὐανδρος*, "having good or brave inhabitants," is an epithet particularly applied to the province of Persis in the Behistun Inscription (No. 3, l. 8, 9, p. 274; see Rawlinson, *As. Soc.* xi. p. 85). With these combinations within his reach, it is really surprising that Rawlinson should say confidently that "the first element in *Amardi* cannot possibly be *hu*, 'good'" (Herod. iii. p. 550). The sibilant seems to be prefixed chiefly for the sake of additional emphasis; at least such is the general effect of this prothesis in our language; but it sometimes belonged to the fuller and more original form, as in *λίπα*, *ἀ-λείφω*, *s-a-lbon*; *latus*, *t-latus* (*τλητός*), *s-t-latus*; *rip*, *t-rapping*, *s-t-rip*; *lis*, *s-t-lis*; *lentus*, *s-t-lentus*; *locus*, *s-t-locus*, &c. (see above, p. 215). The labials appear for the most part to be prefixed to words the meaning of which would admit of such additional force as might be derived from composition with *ἀπό*, *a-pa*, *a-va*, *ab*, *off*, to the latter part of which the prothesis corresponds. A similar explanation is applicable to the dentals (comp. *ἔτι*, *a-ti*, *a-d*, &c.), and to the Latin prefix *re* (*πα-ρά*, *pa-ra*, &c.). We do not, however, believe there has been any aphaeresis, as Pott suggests (*Etym. Forsch.* ii. p. 156): the monosyllabic elements are shortened into single letters, in Greek as in the German dialects (see Grimm, *Deutsche Grammatik*, ii. p. 700), but we cannot admit the propriety of stating that, when a prefix presents traces of one of the elements of a compound worth, the other part of that compound prefix must have been originally there: this amounts to a denial of the separate use of these elements, which, however, is too well known to be doubted.

214 (III) When a root, or rather quasi-root, terminates with a consonant, and is combined with some element beginning with a consonant, we frequently lose all immediate traces of the original form of the root in consequence of its fusion with the termination. This process is generally called Assimilation; it may sometimes be termed Absorption, and in most cases would be included under those changes

which we are accustomed to call euphonical. We may trace it in the melting down of two words into one by crasis, which we may observe in our common conversation, a crasis which in Sanscrit is sometimes extended through a whole sentence.

It will be convenient to consider the different kinds of assimilation separately. They are, (1) *a.* Assimilation proper, or doubling one of two consonants which meet in a word, and leaving out the other. *b.* Doubling a consonant to replace a vowel which follows it. *c.* Absorption and compensation in either of the two last-mentioned cases. (2) Substituting $\sigma\sigma$ or ξ for a consonant and ι . (3) *a.* Change of a consonant to one more symphonic with a succeeding consonant. *b.* Insertion of a symphonic consonant in certain cases. (4) Omission of the final consonant of the root when it is identical with one in the termination.

215 (1) *a.* Assimilation of the first consonant to the second: $\xi\nu\text{-}\nu\nu\text{-}\mu$ for $\xi\sigma\text{-}\nu\nu\text{-}\mu$ ($\text{F}\acute{\epsilon}\varsigma\text{-}\nu\nu\mu$, Sanscr. *vas*, *ves-tis*); $\acute{\alpha}\mu\mu\epsilon\varsigma$, $\text{ῥ}\mu\mu\epsilon\varsigma$, for $\acute{\alpha}\sigma\mu\epsilon\varsigma$, $\text{ῥ}\sigma\mu\epsilon\varsigma$ ($\text{V}\acute{\epsilon}\delta\alpha\text{ }asm\acute{\epsilon}$, $yushm\acute{\epsilon}$); $\kappa\omicron\mu\mu\acute{\omega}$ from $\kappa\acute{\omicron}\sigma\text{-}\mu\omicron\varsigma$, $\kappa\alpha\theta\text{-}\alpha\text{-}\rho\acute{\omicron}\varsigma$, Bæot. $\kappa\theta\text{-}\alpha\text{-}\rho\acute{\omicron}\varsigma$, Sanscr. *çudh*; *flam-ma* from *flag-ro*, $\phi\lambda\acute{\epsilon}\gamma\omega$; *il-lustris* for *in-lustris*, &c.

Assimilation of the second consonant to the first: $\kappa\omicron\theta\acute{\rho}\acute{\eta}$ for $\kappa\omicron\theta\text{-}\sigma\acute{\eta}$, $\acute{\omicron}\lambda\text{-}\lambda\nu\mu$ for $\acute{\omicron}\lambda\text{-}\nu\nu\mu$, $\text{ἵ}\pi\text{-}\pi\omicron\varsigma$, $\text{ἵ}\kappa\text{-}\kappa\omicron\varsigma$, for *eq-vus*, Sanscr. *asvas*, Pers. *aspas*.

b. The vowel ι is frequently represented by a doubled liquid or σ , and that too, whether the ι follows or precedes: $\acute{\alpha}\lambda\text{-}\lambda\omicron\varsigma$, *ol-lus*, *il-le*, *al-ius*, Sanscr. *an-ya* (above, §§ 135, 166); $\phi\acute{\upsilon}\lambda\text{-}\lambda\omicron\nu$, *fol-ium*; $\mu\acute{\alpha}\lambda\text{-}\lambda\omicron\nu$, *málion*; $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$, $\mu\acute{\epsilon}\sigma\iota\omicron\varsigma$; $\kappa\nu\nu\omicron\kappa\acute{\epsilon}\phi\alpha\lambda\lambda\omicron\varsigma$ for $\kappa\nu\nu\omicron\kappa\epsilon\phi\acute{\alpha}\lambda\omicron\varsigma$ (Aristoph. *Equ.* 416; Phryn. *Append.* p. 49; Photius, p. 188 Pors.); $\acute{\epsilon}\lambda\lambda\alpha\pi\acute{\iota}\nu\eta$ ($\acute{\epsilon}\iota\lambda\alpha\pi\text{-}$), $\acute{\omega}\tau\epsilon\lambda\lambda\acute{\alpha}$ ($\omicron\upsilon\tau\epsilon\iota\lambda\acute{\eta}$), $\mu\acute{\alpha}\gamma\epsilon\theta\acute{\rho}\omicron\varsigma$ ($\mu\acute{\alpha}\gamma\epsilon\upsilon\omicron\varsigma$), $\xi\acute{\epsilon}\nu\nu\omicron\varsigma$ ($\xi\acute{\epsilon}\iota\nu\omicron\varsigma$), $\phi\acute{\alpha}\text{-}\epsilon\nu\nu\omicron\varsigma$ ($\phi\alpha\epsilon\iota\nu\omicron\varsigma$), $\mu\acute{\epsilon}\lambda\lambda\iota\chi\omicron\varsigma$ ($\mu\acute{\epsilon}\iota\lambda\iota\chi\omicron\varsigma$), $\chi\omicron\lambda\lambda\acute{\alpha}\delta\epsilon\varsigma$ for $\chi\omicron\lambda\iota\acute{\alpha}\delta\epsilon\varsigma$ (Phryn. *Append.* p. 72), &c. Frequently the doubled σ represents a guttural or dental succeeded by ι , as in $\theta\acute{\alpha}\sigma\sigma\omicron\nu$ for $\tau\acute{\alpha}\chi\iota\omicron\nu$, $\kappa\acute{\rho}\acute{\epsilon}\sigma\sigma\omega\nu$ for $\kappa\omicron\tau\acute{\alpha}\iota\omega\nu$.

c. Absorption of and compensation for a consonant: $\lambda\acute{\epsilon}\gamma\omega\nu$ for $\lambda\acute{\epsilon}\gamma\omicron\nu\tau\varsigma$; $\text{ἵ}\pi\mu\omicron\upsilon\varsigma$ for $\text{ἵ}\pi\mu\omicron\nu\text{-}\varsigma$; $\chi\alpha\omicron\upsilon\epsilon\iota\varsigma$ for $\chi\alpha\omicron\upsilon\epsilon\iota\tau\varsigma$.

Absorption of and compensation for a vowel: $\tau\acute{\upsilon}\pi\tau\epsilon\iota\varsigma$ for $\tau\acute{\upsilon}\pi\tau\epsilon\varsigma\iota$; $\gamma\epsilon\nu\acute{\epsilon}\tau\epsilon\iota\omicron\alpha$ for $\gamma\epsilon\nu\epsilon\tau\epsilon\iota\omicron\alpha$; $\mu\acute{\epsilon}\lambda\alpha\iota\nu\alpha$ for $\mu\epsilon\lambda\acute{\alpha}\nu\iota\alpha$; $\acute{\epsilon}\xi\alpha\iota\phi\eta\nu\varsigma$ for $\acute{\epsilon}\xi\alpha\pi\acute{\iota}\nu\eta\varsigma$.

216 (2) The present tense of a verb, or that on which its peculiar conjugation depends, is generally a longer form than the other tenses: it contains besides the root an unorganic and generally a pronominal addition. This addition is very often one of the equivalent pronominal elements τ , ν , or the relative element $\text{-}\gamma\alpha$, and we have many derivative verbs in $\text{-}\zeta\omega$ or $\text{-}\sigma\kappa\omega$. Thus from the roots $\tau\nu\pi\text{-}$, $\tau\alpha\mu\text{-}$, we have the present tenses $\tau\acute{\upsilon}\pi\text{-}\tau\text{-}\omega$ and $\tau\acute{\epsilon}\mu\text{-}\nu\text{-}\omega$: we have both $\acute{\alpha}\tau\iota\mu\acute{\alpha}\omega$

and ἀτιμάζω; both γηράω and γηράσκω. The element *ya* appears to be concealed in the contracted verbs, as they are called, and in the very large class of verbs which form the present in -σσω, or, what is only a dialectical variety, in -ττω. In all these last it is obvious that assimilation has taken place: the only question is, with which of the terminations mentioned above the last consonant of the root has been consolidated. This question cannot be answered without a removal of the difficulties which have always been experienced by etymologists in fixing the value of the letter ξ. This letter, as we have already shown (§ 112), is an assibilated or softened δ. As an assibilated δ it was originally equivalent to δσ; and it is frequently found in the dialectical varieties of the Greek language under the transposition σδ. As a softened δ it is equivalent to δγ, or the English soft *g* or *j*, represented in modern Italian by *gi* or *ge*, which may be derived from δσ, and often passes into a mere *sh*. This appears from investigations in the Greek language only; thus Ζεύς (= Ζεΐς), genitive δειφός, ξα- = δια-, μέζων or μείζων = μερίων, ὀλίζων = ὀλιγίων*, πρωϊ-ξός, χθι-ξός = πρωϊ-δός, χθιδός, “the before-day,” “the near day” (for according to Macrobius, *Saturnal.* i. 15: *Jovem accipimus lucis auctorem, unde et Luctetium Salii in carmine canunt, et Cretenses Διὰ τὴν ἡμέραν vocant, ipsi quoque Romani Diespitrem appellant, ut diei patrem*). In some Latin forms *di* is actually written for *z* (see Schneider, *Elementar-lehre*, i. p. 386; Lobeck, *Aglaoph.* i. p. 296), and conversely, W. Dindorf would write κάρξα for καρδιά in three passages of Æschylus (Steph. *Thes.* Vol. ii. p. 1106). A comparison with other languages leaves no doubt whatever on the subject: compare ξυγόν with Sanscrit *yuj-*, Latin *jug-um*; *juturna* with *diuturna*; *Janus* with *Diana*; *jubar* with Sanscrit *div*, *dyu*, Latin *āies*, Italian *giorno*; ξέα with Sanscrit *yava*; ξιγρίβει with “ginger;” ξύζυφος with “jube;” ξάω with Sanscrit *jiv*, Lithuan. *gyvs*, *gyvenù*, *gyvatà*, Slavonic *schivù*, &c. Similarly, in the formation of the Russian comparative *kye* = *ch*, as in *kryepkie*, “strong,” *kryepche*, “stronger;” *gye* = *j*, as in *dorogye*, “dear,” *doroje*, “dearer;” *chye* = *sh*, as in *suchye*, “dry,” *sushe*, “drier.” The dentals *d*, *t*, *st* are changed into *j* (French), *ch*, and *shch*, when followed by the comparative affix *ye*. When it is represented by the transposition σδ, ξ admits of both modes of proper assimilation: the σ is assimilated to the δ in μάδδα for μάξα, in πλάδδω for πλάζω, &c.; the δ to the σ in νίσσω for νίζω, ἀοσσείν from ἄοζος, λαπάσσω for λαπάζω, &c.

* The remarks made by Bopp (*Vergleichendes Accentuationssystem*, pp. 224—226) on these comparatives are partly erroneous, and partly derived from the former editions of the present work. He refers to Corssen in the *neue Jahrb. f. Phil. u. Päd.* LXVIII. p. 244, a periodical which we have never seen.

Those verbs which are assimilated in -σσω very often return to the former assimilation, thus for σφάζω we have σφάττω.

Having now determined the two values of ξ, and therefore of the termination -ξω, we shall be able to establish with more accuracy the nature of the assimilation of verbs in -σσω, -ττω. Buttmann stoutly denies the possibility of such an ending as -σσω without an included guttural (*Lexilog.* II. p. 111), and would even go so far as to derive ἀλλάσσω from ἀλλαχοῦ (II. p. 198). But, besides the fact which we have just mentioned, that -ξω may be assimilated to -σσω, the other view is established by the instances quoted by Lobeck (*Paralipomena*, p. 403): namely, ἀφάσσω, κλαδάσσω, κλυδάσσω, παλάσσω, σπαράσσω, ἀλθέσσω, ἐδρήσσω, λαφύσσω, λυμάσσω, &c. Leaving out these words, and such as φράζω, root φραδ-, ὄξω, root ὀδ-, which are never assimilated, we must consider those in which a final consonant of the root is actually contained and concealed in the assimilation, as in the following examples: (1) Gutturals: πράσσω, root प्राग-; τάσσω, root तग-; ἄσσω, root अङ्क-, αἰγ-; φρίσσω, root फ्रिक्-; ῥήσσω, root र्हङ्क-; πλῆσσω, root प्लहङ्क-; δράσσω, root द्राग-. (2) Labials: πέσσειν, root पेप-; ἐνίσσειν, root ἐνιπ-; λάξομαι, root λαβ-; νίπτειν, νίσσειν, νίξειν; κόσσειν κόπτειν. (3) Dentals: κορύσσειν, root κορυθ-; ἐρέσσειν, from ἐρετ-.

Now it is quite clear that these verbs are not formed by a mere addition of -σω to the root: by this addition the futures of all of them are characterized, and it would be absurd to suppose that the only difference between a present and future should be an assimilation of one of them. The termination of a present tense, if strengthened at all, must involve one of the pronominal endings, τ, ν, σκ, ξ, or γα. Now the termination in this instance cannot be τ or ν, for there is no example of the assimilation of these letters with any preceding mute. Nor can it be -σκ appended to a root ending with a guttural, for then the assimilation takes place according to (4), as in λάσκω for λάκ-σκω, μίσγω for μίγ-σκω. The only way in which the ending -σσω, -ττω can arise, is from an assimilation of the ending ξ affixed to roots terminating with a vowel, or of a guttural or dental with the pronominal ending γα. It has been mentioned before that both gutturals and dentals, when followed by γ, are softened into sibilants, a softened guttural being equivalent in many cases to a softened dental, and thus both are represented by ξ (compare ὀλίξων with ὀλίγος, and Διός with Ζεύς). Accordingly, it is probable that in the majority of cases the guttural or labial has been softened into a sibilant by the addition of the pronominal element ια, Sanscrit γα, which is represented by a doubling of the sibilant, so that πράσσειν may stand for प्रागέειν, or प्राγγέειν, as θαῦσον stands for τυχίον, and ἐρέσσειν for ἐρετέειν or ἐρέτγειν, as κρέσσω for κρατίων. This appears more clearly in the verb-

roots which have liquid endings: here the iota is occasionally transposed to counterbalance an omission of the vicarious liquid: compare *φθείρω*, *γείνω*, *κτείνω*, with the other forms *φθέζω*, *γέννω*, *κτεννω*. Compare also *χραισμεῖν* with *χρήσιμος*. The appearance of this ending after roots terminating in labials cannot be explained in this way. In all the labial verbs which have by-forms in *ξ* and *σσ*, the labial seems to stand for a digamma, which has been in some cases omitted without compensation, and in others represented only by its guttural element. Thus in *νίπτειν*, the root is *νιβ-*, judging from *χερνίβ-α*, &c. That however this *β* is the representative of a digamma, and that the real root is *νεF* = *neqv*, appears from the verb *νέω* (*νεFω*), *ἔνευσα*, *νεύσομαι*, &c., *ναῦς*, *navis*, &c., which convey the general idea of "being in the water," compared with the by-form *νήχω*, which contains the guttural only. Hence *Nep-tunus*, "the god of the sea," stands by the side of the Etruscan *Ne-thuns* (*Varron*. pp. 148, 168), and the Greek *Νη-ρεῦς*, where the guttural perhaps is absorbed. In many of the formations from this root, as *νέω*, *νήσος*, *νίτρον* for *νίπτρον*, &c., the digamma has vanished; in the case of *νί-ξω*, *νί-σσω*, then, we might suppose that these terminations are merely suffixed to the root denuded of its terminating digamma-sound. When, however, we advert to the *ι* in *ναίω*, and to the same letter either directly or by implication contained in the other forms, it seems more reasonable to conclude that the guttural element became predominant in these forms, and that it is simply combined with *ι* in the verb *νίζω* = *νι-γίω*: comp. the Latin *rabies* with the French *rage*, *Rutupium* with the modern *Rich-borough*, *pædagogium* with *page*, &c. The same may be said of *λά-ξομαι*, from the root *λαβ-* or *λαF*, *λεF*, for it is clear that *λαχ-* (in *λαγχάνω*, &c., Hebrew *לָחַץ*, *lāqā'h*) contains the same root, and this of course indicates a combination of the guttural with the labial in the original form of the word. In *πέσσειν*, from *πεπ-*, it will be recollected that the labials, between which the root-vowel of the Greek form is confined, are represented in the Latin *co-qvo* = *qvoqvo* by two *qv*'s (above, § 121); the second labial is still a softened guttural in the Sanscrit *pach-*. The same is to be observed of *ἐνίσσειν*, *ἐνίπτειν* (whether it is connected with *ἔπος*, *voc-s*, Sanscr. *vāch*; with *ἔπομαι*, *sequor*, Sanscr. *sach*; or with *νίκ-η*, *νείκος*); and of *ὄσσομαι*, *ὀπτομαι*; *ὄσσε*, *ὄψις*, *τριωτίς*, *τρίοπις*; comp. Latin *oculus*, Sanscrit *īksh*. The idea of striking conveyed by *κόπτειν* is derived from that of butting with the head (*κεροτυπεῖν*, &c.), and all the cognate words point to this union of stooping and striking in the meanings of the word: compare *κύπ-τειν*, *κυβερνάειν* (to direct the head of a ship), *κυβ-αρε* (to lay down the head), *cap-ut*, *κεφαλή*, Sanscrit *kapāla*. But besides the root *cap-*, *κοπ-*, for "a head," we have also an accessory root *κορ-*, *κορ-σῆ*, *κόρουθ-ς*, Sanscrit *çiras*, &c., with the

same additional meanings of butting, striking, as in *κέρ-ας*. From this second root comes by assimilation *κόσσος*, *κοσσεῖν*, *κόττα*, *κότταβος*, &c., which therefore have no immediate connexion with *κόπτειν*, &c. With regard to *κορύσσω*, *κορύπτω*, *κορύπτιλος*, *κορύπτιλος*, it will be remembered that there is a form *κορύθ-ς*, as well as *κορυφή*. On the whole, then, it appears, that the barytone verbs in *-σσω* or *-τιω*, are properly assimilations either of the suffix *-ζω*, or of a guttural or dental at the end of the root with the pronominal suffix *γα*.

This assimilation of a guttural or dental succeeded by *i* or *y* into *σσ* or *ττ*, which we have been endeavouring to establish in the case of barytone verbs, appears also in the case of certain feminine nouns, in which Bopp, erroneously as we believe, supposes that the original feminine *ι* is not represented (*Vergl. Gramm.* p. 140). Such words are *Θοῤῥσσα* for *Θοῤῥκια*, *βασιλισσα* for *βασιλῖδια*, *ἄνασσα* for *ἀνάκκια*, *μέλισσα* for *μελίττια*. To these feminine forms we must return in the following chapter. Before *ι* the *δ* and *τ* are naturally assibilated, as in *ζα* from *διά*, *θανάσιμος* from *θάνατος*; the *κ* becomes *ς* through the intermediate sound, *ch*, *sh*, as in modern languages; compare *camera*, *chamber*, *chambre*; and when two vowels follow a *t* or *c* the sound in both may be the same; compare *redemption*, *Lucien*.

217 (3) *a*. This rule in most frequently exemplified in compounds with prepositions: as *ἐμβάλλω* for *ἐνβάλλω*; *ἀμφί* for *ἀναφί*, &c. We have *σ* for *δ* in certain words, as *ἄσμα* from *ἄδω*, *οἶσ-θα* for *οἶδ-θα*, *ῥσ-θην* from *ῥδομαι*; *ἐσ-θίω*, root *ἐδ-*, &c.; and this takes place in some cases when there is in fact no actual composition, but only an immediate succession: thus we have in inscriptions *ἐμπυρί*, *συνκαρπῶ*, *ἐστήλη* for *ἐν πυρί*, *σὺν καρπῶ*, *ἐν στήλῃ*.

b. The Greek ear seems to have been particularly averse to the immediate concurrence of *μλ*, *μρ*, *νρ*, *νσ*, *σρ*, *σλ* (above, § 96), and whenever, by contraction or otherwise, any of these pairs of liquids have come in contact, the mute which bears the nearest relation to the first of them is inserted, unless assimilation takes place, or one of the liquids is omitted, which generally happens in the combinations *νσ*, *σρ*: thus *β* is inserted after *μ*, *δ* after *ν*, and *θ* after *σ*; for example, we have *μέμ-β-λεται* for *μεμέληται*; *μέμ-β-λωκα* from *μολεῖν*; *ἄμ-β-ροτος* for *ἄ-μορτος*; *γαμ-β-ρός* for *γαμερός*; *μεσημ-β-ρία* for *μέση ἡμέρα*, and *ὄμ-β-ρος* compared with *humor*; we have *ἀν-δ-ρός* for *ἀνέρος*, and *ἐσ-θ-λός* for *ἐσλός* from *ἐδ-λός*; cf. *edel*, &c. When *μ* is inserted before *π* or *β* as in *ἄ-μ-πλάκημα*, *πί-μ-πλημι*, *ὄ-μ-βοιμος*, &c., it is merely an instance of *anusvāra*.

218 There is one word in which this insertion of *β* has not been observed by Greek scholars, and as it has occasioned some difficulty

and misconception, it will be worth while to explain it more at length. We allude to *ἀμ-β-λός*, which appears to us to be merely another form of *ἀμα-λός* and *ἀμαν-ρός*, with both of which it coincides to a certain extent in signification. The primary meaning seems to be "smooth," "reduced to a level," as opposed to any word signifying "pointed," "projecting," "sharp;" hence, by a natural transition, it implies want of vigour or energy,—the weak, timid, or tender. It is also applied to express the fading of colours, loss of the vivid freshness which once distinguished them, &c. The first syllable seems to be one of those prefixes of which we have spoken above. At least, the word *μαν-ρός* appears separately, and *μα-λα-κός*, its synonym, seems to be only another form of *ἀ-μ-β-λός*, the second pronominal stem being appended under the shape *-κός* instead of *-ός*. *Μα-ρα-ίνω*, which in its earliest use signifies "to extinguish fire" (Homer, *Hymn. Merc.* 140), and which is particularly opposed to *φλέγω* (Soph. *Ajax*, 700), seems to be a derivative of *μανρός*. As we have *ἀμβλύσκω*, *ἀμβλυοῦμαι*, *ἀμβλόω*, from *ἀμβλός*, so we have also *βλώσκω*, *βλωθρός*; and we find *ἐβληχρός*, as well as *βληχρός*, *βλάξ*. The verb *βλώσκω* and its aorist *ἐβόλον* (comp. *θρώσκω*, *ἔθορον*; *θνήσκω*, *ἔθανον*;) signify "to go;" this meaning arises naturally from the sense of levelling, smoothing, clearing away, so prominent in the adjectives which we have mentioned first. It is curious to observe generally how words denoting sharpness, a point, acuteness, &c., are applied to convey the ideas of rapid motion, and, metaphorically, readiness of wit, while those indicating a level, smoothness, bluntness, &c., are used to signify slowness, dulness, &c. This is particularly the case in Greek. The reader will remember such phrases are *ἀμβλὺν ξιφίδιον*, *ἀμβλὺν ὄρεν*, *οἱ ἀμβλύτεροι τὴν φύσιν* (to which meaning we refer the gloss in Hesychius: *ἄβλας*, *ἄσύνετος*, *ἀγνώμων*), *ἀμβλὺς πρὸς δρόμον*, *ἀμβλύτερος πρὸς τὴν μάχην*, on the one hand, as opposed to *ὀξύ φάσγανον*, *ὀξύτατον δέρεσθαι*, *ὀξύς ἐπινοῆσαι*, *ὀξύτατοι ἵπποι* (Herod. v. 9). We also find *ἀμβλός* opposed to *πικρός*, the original signification of which is undoubtedly "piercing," "penetrating," "sharp." As *πικρός* in its metaphorical use is particularly applied to denote that which is painful or galling to the feelings, so *ἀμβλός* is employed to express the effect of appeasing or removing disagreeable or distressing sensations: thus Thucydides (ii. 65): *ὧν περὶ τὰ οἰκεία ἕκαστος ἡλγει*, *ἀμβλύτεροι ἤδη ὄντες*. We believe that the root of *ἀμ-β-λός*, *ἀμα-λός*, *ἀμανρός*, is found in *ἀμάω*; the opinion of the lexicographers that this verb is connected with *ἄμα*, and means to collect, to gather together, appears to us very erroneous, and we cannot conceive how modern scholars could adopt this view, which seems to be quite at variance with the common usage of *ἀμάω* and its compounds. In all the passages in

which it appears, *ἀμάω* means "to make a level surface," "to lay flat or even," and, when applied to corn, which is emphatically said *φρίσσειν*, "to stick up" or "stand on end" (*horre*) (*Iliad* xxiii. 599), it means "to cut down," "to lay down." The following passages will make this clear. When earth is said to be laid smoothly over any thing, as on a grave, the phrase is *ἐπαμᾶσθαι γῆν*; Herodot. viii. 24: *τάφρους ὀρυζάμενος ἔθαψε, φυλλάδα τε ἐπιβαλὼν καὶ γῆν ἐπαμῆσάμενος*, on which Valckenaer quotes from Plutarch: *τὸ λειότατον ἐπαμᾶται τῆς θινὸς αὐτοῖς καὶ μαλακώτατον*. The two epithets in this passage of Plutarch show clearly that smoothness, and not collection or congeries, is intended. In the same way Homer speaks of smoothing or making level a bed of leaves, with which, he says, the ground was covered, so that there was no need of collecting them, *Odys.* v. 483:

ἄφαρ δ' εὐνὴν ἐπαμήσατο χερσὶ φίλῃσιν
εὐρεῖαν· φύλλων γὰρ ἔην χύσις ἥλιθα πολλή.

Also of milk laid out in *broad* dishes for the purpose of forming cream, *Odys.* ix. 247:

αὐτίκα δ' ἤμισυ μὲν θρέψας λεύκοιο γάλακτος
πλεκτοῖς ἐν ταλάροισιν ἀμῆσάμενος κατέθηκεν.

It is only by perceiving this sense of the word that we can translate a well-known passage of Sophocles (*Antig.* 600), where Askew's emendation, *κοπίς*, is absurd:

νῦν γὰρ ἐσχάτας ὑπὲρ
ρίξας ὃ τέτατο φάος ἐν Οἰδίπου δόμοις, κατ' αὖ νιν
φρονία θεῶν τῶν
νεοτέρων ἀμᾶ κόνις.

A light had beamed upon the root (see our Notes on the *Antigone*, p. 181), but the dust was levelled over it, and made it *ἀμανρόν* again. As the Greeks said *καταμᾶσθαι κόνιν*, so also conversely they could say *καταμᾶ ἡ κόνις*. Hence it is, that, when they spoke of penetrating a surface lying flat or level over something they wished to get at, they used the verb *διαμᾶσθαι*, as in Thucyd. iv. 26: *διαμώμενοι τὸν κάχληκα*, or *διαμᾶν* in poetry, as in Eurip. *Bacchæ*, 701: *ἄκροισι δακτύλοισι διαμῶσαι χθόνα*.

It will be proper, as well for this as for other reasons, to examine minutely a passage in Æschylus, in which the meaning of *ἀμβλύς* has not been properly understood. It is in the *Eumenides*, 229 Müller:

ἦκα, δέχου δὲ πρεμενῶς ἀλάστορα,
οὐ προστρόπαιον, οὐδ' ἀφοίβαντον χέρα,
ἀλλ' ἀμβλὴν ἤδη, προστετριμμένον τε πρὸς
ἄλλοισιν οἴκοις καὶ πορεύμασιν βροτῶν.

We do not agree either with Müller or Hermann in their reading and interpretation of this passage. Hermann's *προσ τετραμμένον μύσος* is quite unjustifiable; it appears to us entirely unmeaning, and is supported by no evidence, either internal or external. We have no hesitation in saying that Müller is wrong in taking *πρός* adverbially: it is obvious from v. 429, *πάσαι πρὸς ἄλλοις ταῦτ' ἀφιερῶμεθα οἴκοισι, καὶ βοτοῖσι καὶ ὄντοῖς πόροις* (comp. 272, *πρὸς ἐστίᾳ θεοῦ*), that *πρός* agrees with the following datives; its position at the end of the line is sufficiently supported by Dindorf's quotation from Soph. *Æd. C.* 495: *λείπομαι γὰρ ἐν τῷ μὴ δύνασθαι μηδ' ὄρεᾶν δύοιν κάκων*. Hermann seems to think that the last words of v. 430 contain an explanation of the *πορεύμασιν βροτῶν* (*Opuscul.* vi. p. 46). But the *καὶ βοτοῖσι καὶ ὄντοῖς πόροις* are not connected with *οἴκοισι*; they are datives of the instrument: "I have been purified at other places by means of sacrifices and the pouring out of water." The *πορεύματα βροτῶν* is only a general expression—"where men go*." We have *νάϊον πόρευμα* in Euripides (*Iph. Aul.* 300), and Hermann, who had read Æschylus so often, might have recollected *τέκνων κέλευθοι* (*Choeph.* 350), and *τρίβοι ἐρώτων* (*Suppl.* 1042). Müller again has lost sight of the connexion, and has mistranslated *ἀμβλύς*, which does not here mean *abgestumpft*, *i. e.* "blunted," but implies a fading or loss of colour, *i. e.* of the colour of blood, as below, v. 270:

βρίξει γὰρ αἷμα καὶ μαραίνεται χερός,
μητροκτόνον μίasma δ' ἐκπλυτον πέλει.
ποταίνιον γὰρ ὃν πρὸς ἐστίᾳ θεοῦ
Φοῖβον καθαρμοῖς ἡλάθη χοιροκτόνοις.

We have a reference to the same sense of *ἀμβλύς* in Plato, *Respubl.* iv. p. 442: *μή πη ἡμῖν ἀπαμβλύνεται ἄλλο τι δικαιοσύνη δοκεῖν εἶναι ἢ ὅπερ ἐν τῇ πόλει ἐφάνη*; "justice has not lost any of its fair proportions, has it? its colours have not become faded and dim, so that it should appear to be something different from that which it appeared to be in the state?"

In the passage of Æschylus now under consideration we read *προσ τετραμμένον* in the sense in which *προστραπέσθαι* occurs in v. 200:

καὶ προστραπέσθαι τοῦσδ' ἐπέστελλον δόμους,

for *προστραπέσθαι δόμους*, in the aorist, is the correlative phrase to *προσ τετραμμένον πρὸς οἴκοις* in the perfect; and the sense of these lines is as follows: "I am not a polluted person, *i. e.* an applicant or

* Dindorf has since given the same interpretation (*Steph. Thes.* Vol. vi. 1482): "de locis quibus homines viam faciunt, Æsch. *Eum.* 239."

supplicant for purification; nor is there the stain of blood upon my hand; but that stain is already (ἤδη) washed out and faded away (ἀμβλύς εἰμι = ἀμβλύνομαι); and I have prayed for purification (προστέτραμμαι) at other temples and in the haunts of men." So that ἀμβλύς is synonymous with οὐκ ἀφοίβαντος χέρα, and προστέτραμμένος with οὐ προστρόπαιος, a sort of tautology very common in Æschylus. See, for instance. *Prom.* 613: οὐκ ἐμπλέκων αἰνίγματ' ἄλλ' ἀπλῶ λόγῳ. *Ibid.* 951: καὶ ταῦτα μέντοι μηδὲν αἰνικηρίως ἄλλ' αὖθ' ἕκαστ' ἐκφράζει. *Pers.* 684: μήτι μακεστῆρα μῦθον ἀλλὰ σύντομον λέγων. *Sept. c. Theb.* 866: οὐκ ἐπὶ φιλίᾳ ἀλλ' ἐπὶ φόνῳ διεκρίθητε. See also *Eumen.* 436—439, 762, 3; *Prom.* 654—7, &c.

In a fragment of the *Æolus* of Euripides (*apud Galen. Charter.* p. 418 Kühn) we have

εἰ μὲν τόδ' ἦμαρ πρῶτον ἦν κακουμένῳ,
καὶ μὴ μακρὰν δὴ διὰ πόνων ἐναυστόλουν,
εἰκὸς σφαδάζειν ἦν ἄν, ὥς νεόζυγα
πῶλον χαλινὸν ἀρτίως δεδεγμένον.
νῦν δ' ἀμβλύς εἰμι καὶ κατηρτυκὼς πόνων,

where ἀμβλύς εἰμι = ἀμβλύνομαι is applied, in the other sense of μαραίνεσθαι, to a taming or quenching of the fiery spirit of a young horse, as appears even from Cicero's loose translation (*Tuscul. Disput.* III. 28):

Sed jam subactus miseriis obtorpui.

In the same sense we find ἀπαμβλύνω in Æschylus, *Sept. c. Th.* 697: τεθρηγμένον τοί μ' οὐκ ἀπαμβλύνεις λόγῳ; *Prom.* 868: μίαν δὲ παίδων ἱμερος θέλει τὸ μὴ κτείνειν σύνευνον, ἀλλ' ἀπαμβλυνθήσεται, "she will be tamed."

We may take this opportunity of explaining the participle κατηρτυκὼς, which occurs as a quasi-synonym of ἀμβλύς both in this passage of Euripides, and in the *Eumenides*, v. 145:

ἄλλως τε καὶ σὺ μὲν κατηρτυκὼς ἐμοῖς
ικέτης προσῆλθες καθαρὸς ἀβλαβῆς δόμοις.

The word κατηρτυόμαι and the perfect participle κατηρτυκὼς are applied to signify arriving at maturity, and the effects of age in sobering the passions of youth. Thus Solon says (p. 66 Bach.):

τῇ δ' ἐκτῇ περὶ πάντα κατηρτύνεται νόος ἀνδρός,
οὐδ' ἔρδειν ἔθ' ὁμῶς ἔργ' ἀπάλαμνα θέλει,

which should be translated, "At the age of forty-two the mind of man is matured in every respect (for the use of *περὶ*, comp. *Plat. Resp.* v. p. 449 A: κακὰς καὶ ἡμαρτημένας περὶ πόλεων διοικήσεις), nor does he now commit the intemperate actions of his youth" (ὁμῶς, i. e. as he

did before). For the use of ἀπάλαμνα, see Theognis, v. 481. From this meaning of καταρτύνω we derive its use to signify the effects produced by training, especially upon horses, to which the passage of the *Æolus* particularly refers. See also Sophocl. *Antig.* 478:

σμικρῷ χαλνῷ δ' οἶδα τοὺς θυμουμένους
ἵππους καταρτυθέντας.

Plutarch, *Themist.* c. II.: τοὺς τραχυτάτους πῶλους ἀρίστους ἵππους γίνεσθαι φάσκων, ὅταν, ἥς προσήκει, τύχῃσι παιδείας καὶ καταρτύσεως. Vol. I. p. 31 D: ἵππους—καταρτύνοντες ἐπὶ τοὺς ἀγῶνας ἄγουσιν. p. 38 D: καταρτύη τὴν φύσιν. From this is derived the peculiar meaning of κατηρτυκῶς—"a horse or ass which has cast its teeth," i. e. "aged," because his age can no longer be known from his teeth, which are therefore called γνώμονες or φραστῆρες, "the index of age." Suidas: Ἀβολήτωρ καὶ ἄβολις καὶ ἄβολος, ὄνος ὁ μηδέπω βεβληκῶς ὀδόντας, ἐξ οὗ γνωρίζεται ἡ ἡλικία τοῦ ζώου. ἐκ δὲ τούτου ὁ νέος, οὐδέπω γνῶμονα ἔχων. γνῶμονα δὲ ἔλεγον τὸν βαλλόμενον ὀδόντα, δι' οὗ τὰς ἡλικίας ἐξήταζον· τὸν δὲ αὐτὸν καὶ κατηρτυκῶτα ἔλεγον, ἐκ μεταφορᾶς τῶν τετραπόδων. καὶ ἀπογνώμονας, τοὺς ἀπογεγηρακῶτας, οἷς ἐλελοίπει τὸ γνῶρισμα. καὶ ἄβόλους πῶλους τοὺς μηδέπω βεβληκῶτας ὀδόντας. Hesychius: Ἀβολος. νέος, οὐδέπω ὄψας ὀδόντα. τὸν δὲ αὐτὸν καὶ κατηρτυκῶτα ἔλεγον. Γνώμα τὸν βαλλόμενον ὀδόντα, δι' οὗ τὰς ἡλικίας ἐγνωρίζοντῶν τετραπόδων. καὶ ὁ κατηρτυκῶς ἥδη, λειπογνώμων. λέγεται δὲ καὶ γνῶσις· Κατηρτυκῶς. τελειώσας. κυρίως δὲ ἐπὶ τῶν ἀλόγων ζώων, ὅταν ἐκβάλῃ πάντας τοὺς ὀδόντας. Λειπογνώμων, ὁ μηκέτι βόλον ἔχων· ὁ δὲ τέλειος, καὶ γεγηρακῶς μη ἔχων γνωρίσματα τῆς ἡλικίας. Malala, *Chron.* p. 379 (quoted by Toup, III. p. 539): πρωτοβόλος. *Pullus, qui primos dentes emittit.* From this it appears that in the passage of Euripides κατηρτυκῶς is used in its secondary and more limited sense as indicating the age of a horse, and so the *Antiatticistes* (*Bekkeri Anecd.* p. 105, l. 25) understood it: Κατηρτυκέναι ἐλέγοντο οἱ μηκέτι βόλον ἔχοντες ἵπποι. Εὐριπίδης Αἰόλω. In the passage of Æschylus (*Eumenides*, 451) κατηρτυκῶς is taken in its wider signification, "having performed or completed," i. e. all the necessary rites, just as τέλος, τελέω, τέλειος, τελειόω are used absolutely in speaking of the performance of sacred rites, although they only denote completion or fulfilment in general, and τέλειος is used like κατηρτυκῶς, in speaking of the age of animals, in opposition to ἄβολος. Plato, *Legg.* viii. p. 834 c: μονίπποις τε ἄθλα τιθέντες, πῶλοις τε ἀβόλοις καὶ τελείων τε καὶ ἀβόλων τοῖς μέσοις καὶ αὐτοῖς δῆτοις τέλος ἔχουσι. The Scholiast, on the passage of Æschylus, felt this, when he wrote κατηρτυκῶς. τέλειος τὴν ἡλικίαν. τοῦτο δὲ ἀπὸ τῶν ζώων: and Hesychius too: καταρτύναι. κατασκευάσαι. τελειῶσαι.

στερεῶσαι. Also St. Paul (*Corinth.* ii. xiii. 11): καταρτίζεσθε, "be perfect." Καταρτύνω is used in this more general sense in Soph. *Æd. Col.* 71: ὡς πρὸς τι λέξων ἢ καταρτύσων μολεῖν; on which Suidas writes: καταρτύσων. παρασκευάσων. εὐτρεπίσων. And thus we have, in the use of ἀμβλὺς and κατηρτυκῶς by Æschylus and Euripides, a fruitful instance of the manner in which two authors nearly contemporary may employ two words in connexion with one another with a marked difference, but yet with an affinity of meaning that cannot be mistaken.

219 (4) Of this rule we find frequent exemplifications in verbs and verbal compounds, both in Greek and in Latin. Thus διδάχῃ, διδάσκειν=διδάχ-σκειν; *docere, discere=dic-scere*; δικάειν, δίκος=δίκ-σκος; λακεῖν, λάσκω=λάκ-σκω; εἶκω, εἶσκω=εἶκ-σκω; εἰπεῖν, ἴσκειν=ἴπ-σκειν; ἔχω, ἴσχω (ἔχ-σκω); λέγω, λέσχη=λέγ-σχη; μυγῆναι, μίσγω=μύγ-σκω, *misceo=mic-sceo*; παθεῖν, πάσχω=πάθ-σκω=πένθ-σκω; μόγ-ος, μόσ-χος=μόγ-σκος (comp. *vacca, vewhere*); αἶδω, αἶσχος=αἶδ-σχος; ἔξ (ἐκ) ἔσχατος=ἐκ-σκατος; *precor, procus, posco=proc-sco*.

220 We may mention as outwardly connected with assimilation, though in fact by no means proceeding from the same cause, the very common practice of doubling liquids in Greek words where no compensation is necessary or intended. This is particularly remarkable in some proper names which occur in the Attic dramatists; as Ἴππομεδοντος (*Æsch. Sept. c. Theb.* 488), Παρθεννοπαῖος (*Id. Ibid.* 547), Τελλεύταντος (*Soph. Ajax*, 210), Ἀλφεισίβοιαν (*Soph. ap. Priscian.* p. 1328), Ἴπποδάμμου (*Aristoph. Equit.* 328), in some of which passages editors of the Porsonian school have introduced alterations as forced as they are unnecessary. To these arbitrary reduplications we may add βρόγχον for βρόχον in *Theognis*, v. 1095. (See Scaliger *ad Euseb.* p. 119, quoted by Gaisford, *Poet. Min.* ii. p. xxix.)

221 An inquiry into the rules of assimilation might lead us to an investigation of a converse phenomenon in the Greek and other languages, which Pott (*Etym. Forsch.* ii. pp. 65 foll.) calls *dissimilation*. This consists in the avoidance of a concurrence of similar syllables and letters, hiatus of vowels, and so forth: and euphony is alleged as the cause of this as well as of its opposite. We do not think, however, that this so-called dissimilation is due to anything beyond accident or caprice, a wayward choice or an accidental mispronunciation. That the Greek ear often repudiated such concurrences, and that many Greek words, especially compounds, have lost in consequence essential consonants, is well known (see Lobeck *Paralipom. Dissertatio prima*); but it is equally certain that they had, when the fit took them, a strong predilection for alliteration, an

irresistible propensity to assimilation in words and *homœoteleuta* in sentences, of which their constant use of the *figura etymologica* is a sufficient proof. Of their dislike to a concurrence of aspirates, or indeed to an appearance of two aspirates in the same word, and of the transpositions occasioned by this taste, we have already spoken. Of the other changes which fall under the head of dissimilation it is scarcely worth while to speak, for they seem incapable of a reduction to rules and systems; besides, the phenomena are to be collected from so wide a field that the enumeration would far exceed the limits to which these discussions are necessarily confined.

One of the most common changes of dissimilation with which a root may be affected without losing its identity is that called *Metathesis*. The metathesis of vowels takes place most frequently in the case of liquids, because it is a matter of indifference whether a vowel is placed before or after them. Instances of this change meet us constantly in every language. Thus in English we have *bird*, *brid*; *third*, *thridde*; *bordel*, *brothel*; *burst*, *brust*; *board*, *broad*; &c. (*Diversions of Purley*, II. pp. 83 foll.); and there is a curious instance of the same kind in Drayton's *Nymphidia*; for when he says,

"By the mandrake's dreadful groans,

By the *Lubrican's* sad moans,"

it is clear that he is alluding to the *Lubberkin*, that lazy fiend, who piteously resisted his brother fairies' attempts to awaken him. In Greek we find ἔθανον, θνήσκω; καρδία, κραδία; ῥέξειν, ἔργον; ἔμολον, βλώσκω, and even in the same word ἐργ-ήγορα (*Journal of Education*, v. p. 305). And so also in comparisons of different languages, as English *horse*, German *Ross*, French *roussin*; English *fright*, German *Furcht* for *Vor-acht*; English *folk*, German *Volk*, Latin *volgus*, Greek ὄχλος, Cretan πόλχος, Slavonic *plok*, *polk*, *pulk*, Lithuanian *pulkas* (as we read of a "pulk of cossacks"), old Norse *flockr*, Anglo-Saxon *floc*, English *flock*; &c. Metatheses like ψίν for σφίν; ψάλιον for σφάλιον; φάσανον for σφάσανον; &c., are analogous to that transposition of the aspirate and semivowels, which we have already stated and explained. We may also compare ξίφος = σίλφος (*schief*) with the old Egyptian *sef*, and the Semitic analogies pointed out by Bunsen, *Ægypten*, I. p. 582. There does not seem to be merely a metathesis in σφήξ compared with *vespa*; but rather a concealed reduplication in the latter, like that of *vivus* compared with *quick* (above, § 121); for *vespa* = *hvespa* = *svespa* = *spe-spa*, and σφήξ contains only one of these elements, with the formative affix ξ.

222 (IV) (1) The most systematic of the changes which a root undergoes is the modification of its vowel. This is produced by

influences similar to those to which we have attributed the assimilation of the consonants, namely, the contact with the prefix and suffix, the greater or less weight of which induces a less or greater weight of the root-vowel.

It has been shown in a former chapter that there are properly speaking only three distinct vowels: *a* or the common sound by which all consonants are articulated; *i* and *u* the ultimate state, the former of the gutturals and the dentals, and the latter of the labials. The vowels *o* and *e* differ from *a* in weight only.

The Greek vowels *α*, *ι*, *υ*, as opposed to one another, in most cases correspond to the three original Sanscrit vowels *ā*, *ī*, *ū*, and there is seldom, if ever, any interchange or confusion between the different vowels of the two sets; whereas the two Greek vowels, *ε*, *ο*, very often share with *α* in the representation of the Sanscrit *ā*, *ε* being the most common substitution for it, *ο* the next, and *α* the least usual. Of these three representatives of the Indian short vowel, the heaviest is *α*, the lightest *ε*, and *ο* stands between them. As the Indian *a* is the mere articulation of the different consonants which form the Sanscrit syllabarium, and is therefore the shortest possible, it is of course obvious why the lightest of the Greek vowels stands in its place. Any one of the three forms of the Greek articulation-vowel may stand as a representative of the Sanscrit *a*; but practically it appears most frequently as *ε*, less so as *ο*, and most rarely as *α*; thus we have *pañcha*, *πέντε*, *çankhas*, *κόγχος*, *alabham*, *ἔλαβον*. It is a great advantage to the Greek alphabet that it has these distinctions in the weight of the articulation-vowel. In Sanscrit we have sometimes only the accent to distinguish between two different cases, as *pādas*, *πόδες*, *padās*, *ποδός*. If the Greek had not these three vowels, there would be no means of discriminating the three proparoxytones, *ἔχοντος*, *ἔχοντες*, *ἔχοντας*. Of the three distinct vowels *a*, *i*, *u*, it is clear that *i* is lighter than *a* though it is heavier than *e*. This appears, as far as the Latin language is concerned, from the fact pointed out by Bopp (*Vergl. Gramm.* p. 5), that in secondary formations the radical *a* is turned into *i* in syllables terminating with a vowel, and into *e* when the syllable is followed by two consonants, or the consonant which follows is deprived of its vowel and thrown back upon the root-vowel, as in the following instances adduced by Bopp (*l. c.*) and Rosen (*Journal of Education*, viii. p. 244*).

* Rosen asks, "How does it happen that *pario* deviates from the analogy, forming its preterperfect tense *peperi* instead of *pepiri*?" We answer, Because in this word the *r* is thrown back upon the root-vowel.

A.	I.	E.
<i>apiscor</i>	<i>adipiscor</i>	<i>adeptus</i>
<i>aptus</i>		
<i>amicus</i>	<i>inimicus</i>	
<i>arma</i>		<i>inermis</i>
<i>barba</i>		<i>imberbis</i>
<i>caput</i>	<i>occiput</i>	<i>biceps</i>
	<i>sinciput</i>	<i>præceps</i>
	<i>principium</i>	<i>princeps</i>
<i>cado</i>	<i>cecidī</i>	
	<i>stillicidium</i>	
<i>cano</i>	<i>cecini</i>	<i>concentus</i>
<i>fallo</i>		<i>fefelli</i>
<i>jacio</i>	<i>abjicio</i>	<i>abjectus</i>
<i>tuba, cano</i>	<i>tubicinis</i>	<i>tubicen</i>

Now it is quite clear that in all these cases the *i* is introduced into a heavier form than the *a*, and the *e* than the *i*, consequently *i* is heavier than *e* and lighter than *a*. A similar analogy shows that the Latin *u* is heavier than *i*. We have shown elsewhere (*Varronian*. pp. 262 sqq.) that there were three values of the Latin *i* and *u* respectively. (1) The long *î* represents, in composition, the diphthong *ai* = *ae*, as in *in-iquus* from *æquus*; (2) the medium *i* is that which stands for *a* in the instances given above, and also in *inter* for *ἄν-τεο* (§ 204), *in* for *ἀνά* (§ 170), *ille* for *ἄλλος* (§ 136), &c.; (3) the short *ĩ* approximates to the sound of the shorter *u*, and was chiefly used where we should expect *e* before *r* and another consonant, as in *vir-tus* from *vir*. Again, (1) the long *û* represents the diphthong *oi* = *oe*, as in *munus* = *mænus*, and, in composition, the diphthong *au*, as in *in-cludo* from *claudo*; (2) the medium *u* stands for a Greek *o* as in *lup-us*, *λύκ-ος*; (3) the short *ũ* is nearly the same as the shortest *i*, and is chiefly used before *l* and another consonant, where we should expect *e*, as in *con-culco* from *calco*, which, according to the table, ought to be *con-celco*. Now in the first and third cases it is obvious that there can be no difference in weight between *i* and *u*: indeed, *î* is sometimes written for *oi* = *û*, as in *cimeterium* for *κοιμητήριον*; and in *ob-edio* from *audio*, *ê* takes the place of *û*. But the medium or ordinary *u* must have been heavier than the medium or ordinary *i*, for the Greek *o* passes through *u* into *i*; compare the Greek *τύπ-ο-μεν* = *τύπ-ο-μες* with the old forms *sumus*, *volumus*, and their more recent counterparts in *-imus*: so also the Greek *Κάστωρος* passes through the old *Castorus* into the classical *Castoris*, and some genitives in *-us* never became obsolete, as *hujus*, *ejus*, *unius*, &c. Again, in old Latin the vowel of the crude-form is preserved in the inflexions, as in *arcu-bus*,

op-tumus, *pontu-fex*, &c., in all of which the later Latin exhibits an *i* (see Lepsius, *Paläograph*, p. 53). From these instances we should infer that the medium *u* is lighter than *o* and heavier than *i*. That *u* is lighter than *o* is farther shown by the change from *colere* to *cultus*, from *columen* to *culmen*, though the *u* here may have been partly occasioned by that affinity between *u* and *l*, of which the French furnishes so many examples, and which we see also in the transition from the Greek Ἀσκληπίος, Ἡρακλῆς to the Latin *Æsculapius*, *Hercules*. We have perhaps the lightest form of *ũ* in the reduplications *cucurri*, *tutudi*, &c.; for *a* becomes *e* in the reduplicative syllable, just as *η*, *ω* become *ι*. It is probable that *momordi* is a corruption of an original *memordi* or *mũ-mordi*. We observe the same retention of *u* in Sanscrit desideratives, as in *yuyuts*, "to desire to fight." In Gothic, *a* is obviously heavier than *u*, for we have *hulpum*, "we helped," in the plural or heavier form, but *halp*, "I helped," in the singular. We observe the same change from *-thas*, *-tas*, the ordinary dual-endings in Sanscrit, to *thus*, *-tus*, in the longer and heavier forms of the preterite (Bopp, *Vocalismus*, p. 227). In Greek, not only is *o* lighter than *a*, but *ω* is lighter than *η* (§ 116); and the change from *-ιος* to *-εως* proves that *ι* is heavier than *ε*. That *v* is heavier than *ι* appears from the fact that in the weakest forms of words containing labials, whether the labial is vocalized into *v* or not, we find *ι* as the last faint trace of the original form: compare *φύω*, *φνίω*, *νίός*, *φίω*, *φίλιος*; *hva*, *Fi*, *ĩ*; *γραμμα-τεύς*, *γραμμα-τίζω*; *σῦς*, *σίαλος* = *σί-Ψαλος* (below, § 641); *ταχύς*, *τάχιστος*, &c. The Bœotian substitution of *v* for *οι* shows that *v* was equal to *ι* and something more. *A fortiori* *v* is also heavier than *ε*. On the whole then it may be stated that the following tables represent the comparative weight of the Greek and Latin vowels:

Greek: *ᾱ*; *η*, *ω*; *α*; *ο*; *υ*, *ι*; *ε*.

Latin: *ā*; *ū*, *ī*; *a*; *o*, *u*, *i*; *e*; *ũ*, *ĩ*.

223 (2) Besides the euphonical change produced by substituting a lighter for a heavier vowel in a heavier form, there are three other vowel-changes of very frequent occurrence, which we may term adscititious vocalization.

(α) The first is that which the Sanscrit grammarians call *guna* and *vridddhi*; *guna* or "corroboration" takes place when *ṛ* is put before either of the last four of the simple vowels *ĩ*, *ũ*, *ṛ*, *lṛ*; *vridddhi* or "increment" when *ṛ* is placed before one of these vowels after it has been *guna'd*; thus

	<i>ĩ</i>	<i>ũ</i>	<i>ṛ</i>	<i>lṛ</i>
<i>guna</i>	<i>ê</i>	<i>ô</i>	<i>ar</i>	<i>al</i>
<i>vridddhi</i>	<i>ai</i>	<i>au</i>	<i>âr</i>	<i>âl</i>

That the conversion of the vowels *r*, *l**r* into the syllables *ar* and *al* is a *guna*, appears from the fact that *ê*, *ô*, became *ay*, *av* before vowels. This insertion of a new vowel into the root is not in itself significant; it is purely dynamical, takes place in verbal roots only, and, like reduplication, &c., is designed to give that extension to the root which is necessary to adapt it for the expression of duration. In Greek the *guna* is never effected by *α*, but by *ε* in the heavier, and *ο* in the lighter forms. Bopp has rightly remarked (*Vocalismus*, pp. 193 foll.) that the Greek *av* corresponds to a *vridhhi*, not to a *guna* of the *v*, and that although *ai* does sometimes stand for the Sanscrit *ê=āi*, it never does so in cases where *ê* is a *guna* of *i*, with the exception perhaps of *αἴθω*. At the same time he is not correct in stating that whereas *ει* and *ου* are both *gunas* of *ι*, the only allowable *guna* of *v* is *ε**v*, for *σπουδή* is a *guna* as well as *σπένδω*, and *ἀκόλουθος* as well as *κέλευθος*. The greater weight of the vowel *v* is the reason why the lighter vowel *ε* is preferred in the *guna* of *v*.

(β) The second of the changes to which we allude must be carefully distinguished from *guna*. This is when *ι* or *υ* is subjoined to the *α* or *ε* of the root, so as to make apparent *guna*, as, for instance, when we have *νέα-ι-ρα* by the side of *νεαρά*, or *ἐλα-ύν-ω* by the side of *ἐλάσαι*. In this case the intruder is the second, not the first vowel of the diphthong; and as this phenomenon takes place in liquids only, we may conclude that it is due to the nature of the liquid which admits a vowel indifferently before or after it. The doubling of liquids to which we have already referred is a phenomenon of the same kind.

(γ) It seems not unreasonable, after what Lepsius has said (*Paläographie*, pp. 73 foll.), to consider the *anusvâra*, or nasal insertion, as a part of vocalization. The name *anusvâra* or “after-vowel” shows that it is reckoned among vowels by the Sanscrit grammarians, and, like the vowel *r*, it is capable of *guna*. In the conjugations it serves very much the same purpose as *guna*, and we find the same root strengthened by *guna* in one language, and by *anusvâra* in another. Thus, to take the instances given by Lepsius (p. 79), we have from the Sanscrit *chid*, Latin *scid*, *chi-na-dmi* and *sci-n-do* by *anusvâra*, whereas the Gothic makes *sk-a-ida* by *guna*, and if *αἴθω* is a *guna*’d form, we may compare it with the Sanscrit *anusvâra*-form *i-ñ-dh*. The Latin is most partial to *anusvâra*, the Gothic least to, as will be seen from the following instances:

Sanscrit.	Greek.	Latin.	Gothic.
(root <i>liha</i>) <i>lêhmi</i>	(root <i>λιχ</i>) <i>λείχω</i>	<i>lingo</i>	
	(<i>λιπ</i>) <i>λείπω</i>	<i>linquo</i>	
(<i>str</i>) <i>str̥nômi</i>	(<i>στορ</i>) <i>στόρνυμι</i>	<i>sterno</i>	<i>strauja</i>
(<i>tud</i>) <i>tudâmi</i>		<i>tundo</i>	<i>stauta</i>
(<i>uda</i>)	<i>ὔδωρ</i>	<i>unda</i>	<i>vatô</i>

The vowel of the *guna* is softened into *i* in Gothic, a fact which was first pointed out by Bopp, and to which we shall return when we come to a discussion of the verb-conjugation. We may compare with it the insertion of *j* before vowels in the Slavonic languages, sometimes instead of *guna* as in *vjemj* (Sanskrit *vêdmî*); sometimes as an arbitrary insertion; compare *jesmj* with the Sanskrit *asmi*. Of this letter insertion we have some remarkable instances in Æolic Greek. Thus, in a Bœotian Inscription (Böckh, No. 1564, l. 1) we have *τιούχαν ἀγάθαν* for *τύχην ἀγαθήν*; in a Delphian Inscription (Böckh, No. 1688, l. 11), *μηδὲ δῶρα δεξιόσθω* for *δεξιόσθω*; and in the Fragment of Corinna. quoted above (p. 249), we have *Πινδαρίοιο* for *Πινδαρίου*.

224 Before we quit this subject, it will be proper to add a few remarks on the absolute significance of roots, on which some very gratuitous assumptions have been made. Roots being the centres around which the words of a language are grouped, the elements from which the noun and verb develop their multifarious forms, the points of convergence from which they spread themselves out with infinite ramifications, it is unnecessary to suppose that they should all have a distinct meaning when taken by themselves. The fact is, that most of them obtain a significance, recognisable by the understanding, only when combined with those terminations and flexion-forms which make them into words, and in these words they must be examined if we would know them.

The root of a word points to the conception, to the selection of some particular quality of the object which makes most impression upon us, and by which we classify it with the other objects, possessing or appearing to possess the same quality. Why particular combinations of letters should be chosen for the expression of certain qualities, is a mystery which cannot always be explained. It has been hinted that the three primary positions in space were indicated by the first three consonant-articulations, namely, the three *tenués*, and that these constitute the three fundamental pronouns. Farther than this we cannot go. It appears that certain of these pronominal stems, or modifications of them, have become verbal roots; thus, we have the first in *μά-ω* = *μέ-νω*, and in *περάω*, *πῶρος*, &c. (see *Greek Grammar*, Art. 79); from the second in its two forms *Fa* and *tva*, we have *σεύω*, *θοός*, *τί-θη-μι*, *κείμει*, *δέω*, *δύω*, &c.; all

of which preserve the meaning of the pronominal words with which they are connected. We shall see too, that *Ἰάναξ* is only the preposition *ἀ-νά*, with a suffix, and that there might be some reason for selecting the particular syllables which express the relations of father and mother. But, generally speaking, the choice is either arbitrary, or depends upon principles of which it would be idle to seek an explanation.

225 In considering the roots of words, we must be careful to distinguish them according to the metaphysical or historical differences of the same root. A metaphysical difference between two roots etymologically equivalent, is when they express two ideas connected by the relation, not of resemblance, but of contrast: an historical difference is when, with the same meaning, they have suffered those systematic changes, which time and use are continually producing upon the consonants of a language as long as it is spoken. It will be recollected that both these differences are daily taking place: for every man uses every word of his own language according to his own mode of thinking or habits of life; and the pronunciation of words is also subject to continual variation*.

It is easy to illustrate these remarks by examples. Thus many of our English vulgarisms are merely examples of changes, which take place so regularly in certain languages, that they may almost be reduced under general rules: for instance, the addition of a dental as in *gown-d* for *gown*, *varmin-t* for *vermin*, *Negripon-t* for *ἐξ τὸν Εὐριπον*, is the same variation that appears in *hun-d* compared with *canis*, *tyran-t* compared with *tyrannus*, &c. Changes occasionally take place in the secondary applications of terms, which have no reference whatever to their original or radical meaning. Sometimes, to adopt Mr. Cobbett's expression, we have *the same combination of letters, but not the same word*. For example, the word "page," when it signifies the side of a leaf of paper, plainly recalls its origin, the Latin *pagina*. When, however, it means a youthful domestic, whether at court or in a private family, it is the mutilated representative of the Greek word *παιδαγόγιον*, "a little *παιδαγωγός*," i.e. one of those

* "Adeo enim cerea est vocabulorum natura, ut in ipso loquentium ore aliter atque aliter figurentur." Lobeck, *Paralipom.* p. 148.

servants who were especially appointed to wait upon the young master. The French term *chétif*, and our old "caitiff," are derived through the Italian *cattivo* from the Latin *captivus*, as if all baseness and misery were the natural result of misfortune in war. And thus the Slavonians, whose name signifies "glorious," "illustrious," and the root of which constitutes the key-note to the laconic epinicion of their celebrated warrior Suwarrow*, from having merely furnished a large number of prisoners of war, have given us our modern name "slave," *esclave*, *schiavo*. The Bulgari (according to the French pronunciation *Boulgres* and *Bougres*) owe the horrible degradation of their national name to their early connexion with heresy (Gibbon, x. p. 177 Milman). The word *Gypsy*, which signifies "vagabond," and "impostor," is merely a corruption of Egyptian; and in the land of the Nile itself, *gins el Farauni*, "descendant of Pharaoh," is an abusive designation of Christians. Perhaps the most remarkable instance of these changes is furnished by the adjective *πολιός*. There can be no doubt that its primary meaning is whiteness superinduced on a surface previously regarded as darker. It is therefore connected in origin with *πελιός*, "swarthy," i. e. imperfectly black, *πελιδνός*, "livid," and the Latin *pullus* and *pallidus*. Most usually *πολιός* is applied to hair, which has become white, or to old age as indicated by white hairs; then it is applied to animals, e. g. wolves (*πολιοὶ λύκοι*) or kids (*πολιοὶ ἔριφοι*), which have white hairs in their coats; then it is applied to the sea, as broken into white foam (*πολιὸς πόντος*); to the air as bright with light (*πολιὸς αἰθήρ*); to the spring (*πολιὸν ἔαρ*) as a bright season in contrast to winter; to metal when it reflects light from its polished surface (*πολιὸς σίδηρος*, *χαλκός*); and finally to the human skin when it appears white from distension; for it is clear that in Pindar, *Pyth.* iv. 98: *τίς ἀνθρώπων σε χαμαιγενέων πολιᾶς ἐξανῆκεν γαστέρος*; we cannot understand the epithet as referring to the age of Jason's mother, either as implying that he was *τηλύγετος*, which is Hermann's idea, or as conveying a sarcasm, which is Böckh's interpretation; but must explain the phrase by a reference to the whiteness of the distended skin (cf. Pers. iii. 98: *albo ventre lavatur*. Hor. 2 *Serm.* ii. 21: *pinguem vitiis albumque*, and our phrase "a white swelling"). From the word *geist* or *geest*, we have both *gas*, which represents the highest flight of modern science, and *ghost*, which

* Suwarrow's letter to the Empress Katharine on the taking of Ismael was the following couplet:

"Slava Bogu! slava vam!

Krepost vzata, y ia tam."

"Glory to God, glory to thee! The fortress is taken, and I am there."

suggests the most degrading of medieval superstitions. The word "quarrel" leads us back through *querelle* to *querela*, which means a complaint from the weaker or injured party; but our English word signifies rather to take a high ground in asserting one's rights, and even to assume the initiative in a dispute. These meanings find their common ground in the forensic application of the term: for the humble complainant is naturally antecedent to the litigious suitor. When we speak of a *tapster* in modern English, we always imply a burly cellar-man; but our ancestors left this office to women, and *tapster* is the regular feminine of *tapper*, as *spinster* is of *spinner**. Many of these feminine forms are preserved only in proper names, as *Baxter*, *Brewster*, *Sangster*, *Webster*, &c., but they are not the less genuine remnants of ancient employments of the weaker sex, which are now more appropriately transferred to men. The examples which we have given, and to which almost any number might be added, are sufficient to show that even an obvious etymology has often no connexion with the existing acceptation of a word; and from this the inference is plain, that the dissection of words, though uniformly valuable as a department of grammar, is not the only source of information which the lexicographer must render available to his purposes.

226 When we wish to dissect a word in order to arrive at its primary element or root, our first object is to inquire with what other words it agrees in termination or prefix. The latter is stript off at once, but the removal of the affix is often a double operation. To take that set of words called nouns, with which we are in the present part of this work more immediately concerned, we find that every one ends with a short termination, often a single letter, which marks its immediate relation to the other objects in connexion with it, and which we call the *case-ending*. But, in the majority of words, we find, between this and the root, an affix consisting of one or more pronominal stems, which marks the definite class and quality of the noun, and points out the restriction with which the general force of the

* This feminine termination *-ster*, which appears in its fullest form in the Sanscrit *strī*, "a woman," and with a loss of the *t* in the Latin *soror*=*so-sor* and *uxor*=*ug-sor*=*jug-sor* (*Journal of Philolog.* II. 357), will not explain all English words with the same ending. Thus, to say nothing of words derived from the Latin, like *monster* from *monstrum*, we have *dempster* for *doom-master*, *gamester* (=gamesome, in Shakspeare) from *game-master*, &c. after the analogy of "master of the requests," "master of the revels," &c.

roots is applied in the particular instance. When the case-ending alone is removed, the remaining part of the word is called its *crude-form*, whether it has another pronominal affix or not. In most nouns the crude or uninflected form must be still farther denuded before we can arrive at the root or skeleton of the word. Accordingly, in the following analysis of the noun, we have first considered the case-endings or absolute terminations of the noun, and have then examined those pronominal insertions before the case-ending, which may be considered as the terminations, not of the noun, but of its crude-form. The young student will thus more clearly discern by what successive steps he must proceed in dissecting any given noun in order to arrive at a definite conception of its meaning, so far as the signification has remained unaffected by the arbitrary or capricious applications to which we have adverted.

CHAPTER II.

THE CASE-ENDINGS OF THE NOUN.

227 Definition and arrangement of cases. 228 Formation of the feminine noun. Criticism of Bopp's opinion. 229 Reasons for the assumption of the feminine gender in certain nouns. 230 Dual number. 231 Sanscrit case-system. 232 Latin and Greek Declensions. 233 (a) Latin case-forms. 234 (b) Greek case-forms. 235 Origin and mutual relations of the cases. 236 Detailed examination of the cases: (1) *Accusative*. The dental *n* its original affix. 237 Neuter nouns have no nominative. 238 Distinction of the accusatives and locatives in *n*. 239 Accusatives plural of masculine and feminine nouns. 240 Origin of neuter plurals in *a*. 241 Dual forms. 242 (2) *Nominative*. The sibilant *s* its proper suffix, but often absorbed or dropt. 243 Explanation of the nominative sign. 244 Nominative plural formed by a reduplication of this affix. 245 (3) *Implemotive* or *Instrumental*. *b. Dative*. *c. Locative*. Sanscrit forms. 246 Greek Dative includes these cases. 247 (4) *a. Ablative*. Its form in Sanscrit and Latin nouns and in Greek adverbs. 248 (4) *b. Genitive*. Only a longer form of the ablative. 249 Identity of the terminations *-θεν* and *-θεν*. 250 The genitive plural formed from the genitive singular. 251 (5) *Vocative*. A mere crude-form. Its accentuation.

227 **W**HEN we say that a noun is the name of a thing, we mean that it is a word by which we express our conception of some object; now the conception of a natural object is the recollection of the most prominent quality or attribute which we have perceived in it; the name, therefore, points out or refers to this quality or attribute. We have shown in the last chapter that the part of a noun which conveys its meaning to our ear, and which is called its stem or root, never appears by itself in those languages which have inflexions; even the crude or uninflected form is never found alone, except when it stands as the vocative case. To the crude-form, in all other instances, is affixed a termination, which constitutes it a word, and gives it the signification of a noun; for the same root, with a different termination, and perhaps slightly modified, might be a verb. These endings, which make the crude-form into a noun, and which we call the case-endings, it is now our business to discuss separately and in detail. The designation "case," *casus*, *i. e.* "falling," is derived from the Latin version of the Greek *πτῶσις*. Now this word is used by Aristotle to signify not only a case of the noun, but any inflexion either of a noun or a verb, and indeed any word-form, whether declinable, as a comparative in *-τερος*, or indeclinable, as an adverb in *-ως*. Nay more: not merely forms of words, but even forms of sentences, are, accord-

ing to his phraseology, *πτώσεις λόγου*; see Aristot. (?) *Poet.* 20, 10; and for the *πτώσεις λόγου*, compare *Topic.* vi. 10, 1: *ἔτι εἰ τῶν ὁμοίων τοῦ ὀνόματος πτώσεων αἱ ἅμοιαι τοῦ λόγου πτώσεις ἐφαρμόττουσιν, οἷον εἰ ὠφέλιμον τὰ ποιητικὸν ὑγίειας καὶ ὠφέλιμον τὸ πεποιηκὸς ὑγίειαν*, where we have a change in the sentence introduced by a change of tense. In this wider sense of the word *πτώσεις*, it seems to approximate in meaning to the word *πτῶμα*, and to signify the accidental state or condition of an object presented to the senses. Hence the old logicians, according to Plutarch, used *πτώσεις* as a synonym for *ὄνομα*, namely, as signifying whatever was the subject of a predication; *Quæst. Platon.* 1009 c, p. 108 Wyttēb.: *τοῦτο δὲ* (sc. the *πρῶτος λόγος*, formerly called *πρότασις* or “proposition,” and afterwards *ἀξίωμα* or “enunciation”) *ἐξ ὀνόματος καὶ ῥήματος συνέστηκεν* (above, § 124), *ὧν τὸ μὲν πτῶσιν διαλεκτικοί, τὸ δὲ κατηγορήματα καλοῦσιν*. In this sense we call that part of grammar which refers to the forms of individual words by the name of “accidence” (*accidentia*), which seems to point to the Greek *σύμπτωσις*. Supposing then that *πτώσεις* originally designated any change of form to which the individual word was liable, it is easy to understand the transition by which the Stoics limited its use to the declensions of the noun. For *ὄνομα*, in its logical sense, was equivalent to *πτώσις*: accordingly, when *ὄνομα* was merely “the noun,” *πτώσεις* would designate merely the inflexions of the noun. But along with this limited application the Stoics introduced a different explanation of the term. The Peripatetics understood by it merely the *corpus mortuum* of an individual word, the *ὄνομα*, before it was vivified by its connexion with the *ῥήμα*, and became a part of the *λόγος*. But the Stoics considered the nominative as indicated by a perpendicular line, from which the other cases *fell away* or *declined* at different angles. Hence the nominative was called the *πτώσις ὀρθή* or *εὐθεῖα*, i. e. *casus rectus*, and the others the *πτώσεις πλάγαι*, i. e. *casus obliqui* (see Diog. Laert. *Vita Zenonis*, vii. 65). That this, however, was not the original meaning of *πτώσις*, is sufficiently shown by the objection of Georgius Chæroboscus (*ad Theodos.* pp. 9, 35 Gaisford): *δῆλον ὅτι ἡ εὐθεῖα οὐκ ἐστὶ πτώσις κυρίως· εἰ γὰρ ἦν κυρίως πτώσις ἐν παραθέσει εἶχεν εἶναι μετὰ τῶν προθεσέων*. How Chrysippus,

in his book *περὶ τῶν πέντε πτώσεων*, would have dealt with this difficulty, we have no means of knowing: but in all probability the original and secondary meanings of the term were somewhat blended and confused. It is clear that Chæroboscus did not understand the terms ὀρθή and εὐθεΐα as opposed to the term *πλαγία*, for he says (*u. s.* pp. 10, 26): δεῖ γινώσκειν ὅτι ἡ μὲν ὀρθὴ ὀνομαστικὴ λέγεται καὶ εὐθεΐα· καὶ ὀρθὴ καὶ εὐθεΐα λέγεται, ἐπειδὴ ὀρθῶς σημαίνει τὴν οὐσίαν τοῦ πράγματος.—ὀνομαστικὴ ἐπειδὴ δι' αὐτῆς τὰς ὀνομασίας ποιούμεθα*.

We have before adduced reasons for the opinion, that the accusative or objective case is the primitive form of the pronouns; the same, we believe, holds with regard to the nouns: for if the primary expression of self is objective, much more so must be that of any object in the external world. The primary noun is the object of speech, and the correlative expression for the subject is necessarily a subsequent abstraction. In syntax—that is, according to the logical arrangement—there are only three forms of the objective case, expressed by the Latin adverbs *unde*, *ubi*, *quo*, and corresponding to the Greek *genitive*, *dative*, and *accusative*, as the cases of motion from, rest at, and motion to, respectively. Our present object, however, is not the syntactical explanation, but the etymological origin of the forms. In analyzing the cases, therefore, we shall consider the accusative or general objective case first; the others we shall discuss, as nearly as possible, in the order in which they are placed in Sanscrit, which has the fewest prepositions, and therefore the most complete case-system of any of the languages with which we are immediately concerned†.

In Sanscrit there are three genders, masculine, feminine, and

* On the subject of the dispute between the Peripatetics and Stoics respecting the applicability of *πτῶσις* as a designation of the nominative, the reader may consult Ammonius, p. 104 Brandis. And for the designations by which the cases were known to the Greeks, from whom we have borrowed them, see Chæroboscus, *l. c.* There is a paper on the *γενικὴ πτώσις* by Schömann in Höfer's *Zeitschrift*, i. 1, pp. 79 sqq.

† In Finnish there are fourteen cases besides the nominative, namely, seven simple and seven composite cases (Pott, *Etym. Forsch. zw. Aufl.* p. 6); but it is clear that this diffusive enumeration is due rather to a confusion than to a scientific distinction of forms and significations.

neuter; three numbers, singular, dual, and plural; and eight cases, nominative, accusative, implementive or instrumental, dative, ablative, genitive or possessive, locative, and vocative.

228 Of the feminine and neuter genders, as distinguished from the masculine, Bopp says rather quaintly (*Vergl. Gramm.* p. 135): "In Sanscrit the feminine, as well in the stem as in the case-endings, loves a luxuriant fulness of form, and where it is distinguished in the stem or in the ending from the other genders, it is marked by broader, more sounding vowels. The neuter, on the contrary, loves the utmost brevity, but is distinguished from the masculine, not in the stem, but only in the most prominent cases, in the nominative and in its perfect opposite, the accusative, also in the vocative, where this is the same as the nominative." The fact is, that in order to mark more strongly the relative and collective nature of things conceived as feminine or maternal, the merely subjective *s* of the nominative masculine is generally expanded by a broad vocal utterance into a form which reproduces the collective value of the same element (§ 152); whereas the neuter, which has no nominative, appears only in the objective case, which is most liable to mutilation. This explains the circumstance that, in masculine and neuter nouns, the vowel which terminates the crude-form, and to which the case-ending is attached, is generally and properly short; while in feminine nouns, the vowel is long. There are exceptions to this rule, more frequently however in Greek than in Sanscrit. Thus, instead of the *o* which stands for the Sanscrit masculine *ā* in *λόγ-ο-ς*, &c., we have a long *α* or *η* in *παιδο-τρίβ-η-ς*, &c., and in the numerous class of nouns ending in *-της*. In our opinion the *η* here, as elsewhere, includes the lost *y*, which is used to form derivative verbs, and which seems by no means out of place in words expressing an action, as the nouns in *-ης* and *-της* invariably do: and thus *παιδοτρίβ-ης*, *ἐνεργέ-της* are equivalent to *παιδοτρίβ-γας*, *ἐνεργέ-τγας*, just as the corresponding verbs would be *παιδοτριβέω* (*παιδοτρίβγω*), *ἐνεργετέω* (*ἐνεργέτγω*). That we have here the second pronominal element under the form *τι-*, appears more clearly, and throughout the cases, in the feminine forms of nouns in *-της*; compare *προδó-της*, *προδó-τις* (*-τιδ-ς*); *ικέ-της*, *ικέ-τις* (*-τιδ-ς*) &c. In nouns

like $\tau\alpha\mu\text{-}\iota\tilde{\alpha}\text{-}\varsigma$, root $\tau\alpha\mu$, the second element is clearly seen under the double form $\text{-}\iota\tilde{\alpha}\text{=}\iota\check{\alpha}\text{-}\sigma\check{\alpha}$. A different explanation is required in the case of those nouns in $\text{-}\eta\varsigma$ of which the crude-form is $\text{-}\epsilon\varsigma\text{=}\text{-}\omicron\varsigma\text{=}\text{-}\omicron\tau$; for example, $\Delta\eta\mu\omicron\sigma\theta\acute{\epsilon}\nu\eta\varsigma$, crude-form $\Delta\eta\mu\acute{\omicron}\sigma\theta\epsilon\nu\epsilon\varsigma$ (below, § 251) from $\delta\acute{\eta}\mu\omicron\upsilon\sigma\theta\acute{\epsilon}\nu\omicron\varsigma$. Here it seems obvious that the new masculine nominative is formed by adding $\text{-}\varsigma$ with, of course, some connecting vowel, to the crude-form $\text{-}\epsilon\varsigma$, probably another $\text{-}\epsilon\varsigma$; the sibilant at the end of the crude-form naturally becomes evanescent between the two vowels; and these vowels are represented by η ; so that $\Delta\eta\mu\omicron\sigma\theta\acute{\epsilon}\nu\eta\varsigma\text{=}\Delta\eta\mu\omicron\sigma\theta\epsilon\nu\epsilon\text{-}\epsilon\varsigma$ becomes $\Delta\eta\mu\omicron\sigma\theta\epsilon\nu\epsilon\text{-}\epsilon\varsigma\text{=}\Delta\eta\mu\omicron\sigma\theta\acute{\epsilon}\nu\eta\varsigma$. Bopp's remarks (*Vergl. Gramm.* p. 139) on the long $\acute{\iota}$, which appears most frequently in Sanscrit as the characteristic addition for the formation of stems of the feminine genders, seem to us to be altogether erroneous. According to the principles developed in a preceding chapter, the vowel $\acute{\iota}$ is a secondary form of the sibilant ς . It appears therefore to us a sort of philological solæcism to say that $\text{-}\sigma\alpha$ is a corrupt and more recent form of $\text{-}\iota$. On the contrary, we are convinced that the oldest and most genuine method of forming the feminine from the masculine is that which is still preserved in many Greek words, namely, by substituting $\text{-}\sigma\check{\alpha}$ for the $\text{-}\varsigma$ of the masculine nominative. The participial words cited by Bopp furnish simple examples. Thus, from the masc. $\chi\alpha\rho\acute{\iota}\epsilon\iota\varsigma\text{=}\chi\alpha\rho\acute{\iota}\epsilon\nu\tau\text{-}\varsigma$, we have the fem. $\chi\alpha\rho\acute{\iota}\epsilon\sigma\text{-}\sigma\alpha\text{=}\chi\alpha\rho\acute{\iota}\epsilon\nu\tau\text{-}\sigma\alpha$; from $\tau\acute{\upsilon}\pi\tau\omega\nu\text{=}\tau\acute{\upsilon}\pi\tau\omicron\nu\tau\text{-}\varsigma$ and $\delta\iota\delta\omicron\upsilon\varsigma\text{=}\delta\iota\delta\acute{\omicron}\nu\tau\text{-}\varsigma$, we have $\tau\acute{\upsilon}\pi\tau\omicron\upsilon\text{-}\sigma\alpha$, $\delta\iota\delta\omicron\upsilon\text{-}\sigma\alpha$; from $\delta\epsilon\iota\kappa\nu\acute{\upsilon}\varsigma\text{=}\delta\epsilon\iota\kappa\text{-}\nu\acute{\iota}\nu\tau\text{-}\varsigma$, we have $\delta\epsilon\iota\kappa\nu\tilde{\upsilon}\text{-}\sigma\alpha$, and so forth. We consider the forms in $\text{-}\iota\check{\alpha}$, $\text{-}\rho\check{\alpha}$ to be only secondary states of these original forms in $\text{-}\sigma\alpha$, whereas the forms in $\text{-}\iota\tilde{\alpha}$, $\text{-}\rho\tilde{\alpha}$ are contractions of $\text{-}\iota\check{\alpha}\text{-}\sigma\check{\alpha}$, and $\text{-}\rho\check{\alpha}\text{-}\sigma\check{\alpha}$, in which a formative syllable is inserted, just as in the nouns in $\text{-}\theta\text{-}\varsigma$, $\text{-}\delta\text{-}\varsigma$; for we have words in $\text{-}\tau\omicron\iota\tilde{\alpha}\text{=}\text{-}\tau\omicron\iota\check{\alpha}\text{-}\sigma\check{\alpha}$ by the side of words in $\text{-}\tau\omicron\iota\text{-}\delta\text{-}\varsigma$. That the same is the case in the words which end in $\text{-}\eta$, namely, that these are contracted from older forms in $\epsilon\tilde{\alpha}\text{=}\gamma\check{\alpha}\text{-}\sigma\check{\alpha}$, appears from words like $\sigma\upsilon\kappa\acute{\epsilon}\alpha$, $\sigma\upsilon\kappa\acute{\eta}$, where the uncontracted form is still extant. The feminine adjectives $\mu\acute{\epsilon}\lambda\alpha\iota\nu\alpha$, &c. merely exhibit the secondary forms $\mu\acute{\epsilon}\lambda\acute{\alpha}\nu\text{-}\iota\check{\alpha}$, &c. with the absorption and compensation noticed above (§ 215, c); and the same is the case with nouns like $\chi\lambda\acute{\alpha}\iota\nu\alpha$, which have no corresponding masculine forms. In nouns like $\mu\acute{\epsilon}\rho\omicron\mu\eta\nu\check{\alpha}$,

ἐχιδνᾶ, which we must compare with πότνια, πότνα, the ι of the termination is either lost or appears in the penultima only, while it is represented by the doubled λ or ν of ἄμιλλᾶ, ἄελλᾶ, Κόρινθᾶ, &c. (above, § 215, *b*), and contained in the ξ of ῥίξᾶ, according to the proper power of that letter (above, § 216). In the words which end in -θα and -δα we must consider these dentals as representing an original σ- (above, § 149). As the feminines τέκτανα, Λάκαινα, stand by the side of masculines in -ων, which in the one case represents ον-ς and in the other -ων-ς, we cannot consider them as entirely analogous to μέλαινα, &c., unless we presume obsolete masculines in -αν or -ας. The ethnical name Ἀκαρνάν would justify an original Λακάν=Λακήν, of which Λάκων is after all only a lighter form (§ 116): and the verb, τεκταίνω, points to an original τεκτήν=τέκτων, cf. φρήν, εὐφραίνω, &c. The same assumption of obsolete masculines is also required by θέαινα, λέαινα and is easily justifiable: for the Τιτᾶνες presume as their opponents the Θεᾶνες; and Θεάνω must be derived from Θεάν, or Θεανεύς: the extant λῆς, accusative λῆν, may lead us to an original λέαν, of which the participial λέοντ- for λάοντ- is a by-form; compare μῶσα with the participle μῶσα from μάω. The words λυκάων and λυκά-βας would suggest λυκάν, according to the combinations noticed by Müller (*Dor.* II. § 6), and from this masculine, λυκαίνα would be the analogous derivative. With regard to the very peculiar form δέσποινα, we must remark that δεσ-πότης and πότ-νια correspond to the Sanscrit *patis*, “a master,” and *pat-nî*, “a mistress” (Rosen, *Journal of Educ.* VIII. p. 346), and consequently, that we need not trouble ourselves to find in πότνια the feminine for δεσπότης. The analogy of θεράπων, θεράπεινα would conduct us to an obsolete δέσπων, a degenerate participle, of which we have other examples. It may seem an open question whether we are to explain ἄνασσα, βασίλισσα, θάλασσα, Θοῤῥασσα, μέλισσα, &c., with reference to the primary form in -σα or to the secondary form in -ᾶ. There can be no doubt that Θοῤῥασσα might result from Θοῤῥα-ια, βασίλισσα from βασιλιδ-ια, and so forth. But the analogy of *Ulyxes*, compared with Ὀδυσσεύς, might justify our assumption of the original -σα in the case of the gutturals, and the assimilation of the dentals δ-, τ-, to a following σ- might seem not unnatural. As, however, we have

seen that the barytone verbs in $\sigma\sigma$ exhibit the assimilation of a guttural or dental succeeded by $i=y$, it is more reasonable to suppose that the same contact has produced the same result in the feminines in $-\sigma\sigma\alpha$; for it would be strange if the explanation of $\acute{\alpha}\nu\acute{\alpha}\sigma\sigma\omega$ did not apply also to $\acute{\alpha}\nu\alpha\sigma\sigma\alpha$, especially as the future $\acute{\alpha}\nu\acute{\alpha}\xi\omega$ and the dative $\acute{\alpha}\nu\alpha\xi\iota$ are opposed to the assumed assimilations of κ or $\kappa\tau$ to $\sigma\sigma$. When we see the termination $-\iota\alpha$ thus brought back by contact or assimilation to the form $-\sigma\alpha$ from which it originally started, we seem to prove our etymological rule by a process of inversion which is so frequently applicable in arithmetic; and on the whole we cannot but regard Bopp's explanation of these feminine forms as singularly deficient in critical tact and accuracy. That the δ or c of the Greek and Latin feminines is not unorganic, as he supposes, will appear in the next chapter.

229 If it be inquired what is the reason why so many inanimate objects are called by names which are considered masculine or feminine, it will be sufficient to answer, that this may have arisen partly from the idea of comparative strength or weakness (Hermann, *de Emend. rat. Gr. Gr.* p. 125), partly also from association; for if one word of a class be considered as feminine, all other words of a similar signification would be so considered likewise. For a great many words the gender depends upon something included in the idea of the word; a tree, in reference to its branches, and most collective words, would be feminine, from the included idea of *mother* (comp. Buttmann, *Ausführl. Sprl.* § 32, *Anm.* 3). It is for this reason, we conceive, that $\eta \epsilon\pi\omicron\varsigma$ signifies "a body of cavalry" (Thucyd. I. 62), $\eta \beta\omicron\upsilon\varsigma$, "a herd of oxen" (Thom. Mag. *in v.*), and $\eta \kappa\acute{\alpha}\mu\eta\lambda\omicron\varsigma$, "a troop of camels" (Herod. I. 80). We observe the same collective meaning in $\pi\acute{\epsilon}\tau\rho\alpha$, "a rock," *i.e.* a collection of stones, as opposed to $\pi\acute{\epsilon}\tau\rho\omicron\varsigma$, "an individual or single stone" (§ 15, note); also in $\chi\acute{\omega}\rho\alpha$, an extensive tract of country, as opposed to $\chi\omega\omicron\rho\omicron\varsigma$, and its synonym $\chi\omicron\rho\omicron\varsigma$, which signify "any separate piece of land not built on," *i.e.* either the open space in a town, which is the proper meaning of $\chi\omicron\rho\omicron\varsigma$ (*Theatre of the Greeks*, ed. 6, p. [11]), or a field in the country, which is the ordinary signification of $\chi\omega\omicron\rho\omicron\varsigma$: so Herod. II. 154: $\delta\acute{\iota}\delta\omega\sigma\iota \chi\acute{\omega}\rho\omicron\upsilon\varsigma \epsilon\nu\omicron\iota\kappa\eta\gamma\acute{\iota}$

σαι: cf. I. 126. We might say that χώρα, “a territory,” was an adjective agreeing with the suppressed noun γῆ, and that χῶρος referred to ἀγρός; but there is no occasion to call in this machinery. The diminutive χωρίον of course belongs immediately to χῶρος. The large meaning of χώρα is still farther shown by its use to denote the room or space, the *vacans provincia*, which ought to be filled by some one: see Xenoph. *Anab.* IV. 8, § 15: ἐπειδὴ ἐν ταῖς χώραις ἕκαστοι ἐγένοντο, and cf. Blomfield, *Gloss. ad Agam. Æschyli*, 77.

230 We have remarked that the Sanscrit nouns are inflected in the dual as well as in the singular and plural numbers; the same is the case with the Greek, and, to a certain extent, with the Gothic. There is every reason to believe that, in Greek at least, this dual is nothing more than an older and weaker form of the plural, restricted in the newer and more refined speech to the expression of two instead of more; for, first, in many of the pronouns we find the oldest forms of the root in the dual number; secondly, we find in Homer, and indeed in later writers, this dual form used as a plural; lastly, we have the analogy of our own and other languages in support of the opinion, that of two forms of the same word, the older may be confined to vulgar use as a plural, while in the more polished language it is restricted to the number two (comp. Buttmann, *Ausführl. Sprl.* § 33, *Anm.* 1; *Penny Cyclop.* article *Dual Number*). Besides, it appears that some old grammarians considered the forms *dixere*, &c. for *dixerunt*, &c. as duals (Quintil. I. 5, § 42); on the other hand Cicero (*Orator.* c. 47) admitted them as allowable, though antiquated, forms of the plural.

231 As we are about to base our detailed inquiry into the Greek cases upon the more complete case-system of the Sanscrit language, we may introduce the subject by laying before our readers an example of the declension of some simple and regular noun in that language. The name of the divinity, *çiva*, is thus declined:

		Sing.	Dual.	Plur.
1	Nominative	çivas	çivau	çivās
2	Accusative	çivam	do.	çivān

	Sing.	Dual.	Plur.
3 Implementive or instrumental* }	<i>çivêna</i>	<i>çivâbhyâm</i>	<i>çivais</i>
4 Dative	<i>çivâya</i>	do.	<i>çivêbhyas</i>
5 Ablative	<i>çivât</i>	do.	do.
6 Genitive	<i>çivasya</i>	<i>çivayôs</i>	<i>çivânâm</i>
7 Locative	<i>çivê</i>	do.	<i>çivêshu</i>
8 Vocative	<i>çiva</i>	<i>çivau</i>	<i>çivâs</i>

It is not necessary to remind the student of Sanscrit that every final *s* in this scheme is changed by *visarga* into *h*, and every *m* by *anusvâra* into the nasal *n*.

The crude-form of the word which we have taken as an example is *çiva*, which ends in short *a*. Separating this from its affixes, we have the following scheme of case-endings for a noun the crude-form of which is terminated by *â*.

	Sing.	Dual.	Plur.
1	-s	-ô=â—ũ	-as
2	-m	do.	-an
3	-ina	-abhyâm	-is
4	-a-ya	do.	-ibhyas
5	-a-t	do.	do.
6	-sya	-yôs	-anâm
7	-i	do.	-ishu
8	crude-form	-u	-as

It will be remembered that this is only one of many forms of declension in Sanscrit, and that even this form differs when applied to feminine or neuter nouns. In most of the other declensions the instrumental and dative very nearly resemble one another: thus, the dative of *dharâ*, "earth," is *dharâyâi*, and the instrumental *dharayâ*; the dative of *prîtis*, "love," is *prîtayê*, the implementive is *prîtýâ*, and so forth. To this we shall recur hereafter. The general form of the cases in other than the short *a* declension may be derived from the following paradigm (vide Bopp, *Grammatica Sanscrita*, p. 85, or *Kritische Grammatik*, p. 82):

	Singular.	Dual.	Plural.
Nom.	<i>s</i> masc. fem. <i>m</i> neut.†	<i>au</i> m. f. <i>î</i> n.	<i>as</i> m. f. n. <i>i</i> n.
Acc.	<i>m</i> , <i>am</i> m. f. <i>m</i> n.†	<i>au</i> m. f. <i>î</i> n.	<i>s</i> , <i>as</i> m. f. n. <i>m</i> <i>i</i> n.
Instr.	<i>â</i> m. f. n. <i>a</i> m. n.†	<i>bhyâm</i> m. f. n.	<i>bhis</i> m. f. n.

* Wilkins calls this case the *implementive*; Bopp and other Germans term it the *instrumental*. We have mentioned both, but we much prefer the latter designation.

† Only in the *â* declension.

	Singular.	Dual.	Plural.
Dat.	<i>ê</i> m. f. n. <i>ai</i> f. <i>aya</i> m. n.*	<i>bhyâm</i> m. f. n.	<i>bhyas</i> m. f. n.
Abl.	<i>t</i> m. n.* <i>as</i> m. f. n. <i>s</i> m. f. <i>âs</i> f.	<i>bhyâm</i> m. f. n.	<i>bhyas</i> m. f. n.
Gen.	<i>sya</i> m. n.* <i>as</i> m. f. n. <i>s</i> m. <i>âs</i> f.	<i>ô</i> s m. f. n.	<i>âm</i> m. f. n.
Loc.	<i>i</i> m. f. n. <i>âm</i> f.	<i>ô</i> s m. f. n.	<i>su</i> m. f. n.

232 It is customary to divide Greek nouns according to three, and Latin nouns according to one consonant and five vowel declensions†. The differences which constitute the declensions are differences of root and crude-form, not differences of termination. The case-endings must have been originally the same for all nouns; indeed we can observe striking resemblances between them even in the Greek language, as it exists in the writings which have come down to us. For instance, the dative singular and the dative and genitive plural are always distinguished by the same endings, as is generally the accusative singular also. A writer in the *Journal of Education* (Vol. v. p. 19) remarks, "That at one period of the language, probably prior to any written books that have come down to us, all the Latin and Greek nouns had an incremental syllable in the genitive and oblique cases, we consider to be nearly demonstrable." We do not think there are sufficient grounds for this generalization. There is no good reason, so far as we know, for supposing that, in the oldest state of the language, the accusative was ever a longer form than the nominative. If we consider the Latin and Greek nouns in the oldest forms which we have of them, and extend our observations by analogy to all cases, we shall have the following schemes for the case-endings in Latin and Greek. It will be recollected that we take merely the case-endings, and do not trouble ourselves with the roots or crude-forms of particular words.

233

(a) LATIN DECLENSION.

	Sing.	Plur.
Nom.	<i>-s</i> { sometimes absorbed, assimilated, or dropt by <i>visarga</i> }	<i>-[s]es</i> { variously modified }
Acc.	<i>-m</i>	<i>-[m]s</i> { the singular <i>m</i> constantly absorbed }

* Only in the *â* declension.

† The student will find the Greek declensions arranged according to our views in the *Greek Grammur*, 157—193, and the Latin in the *Varonianus*, pp. 293 sqq.

	Sing.	Plur.
Dat. and Loc.	-i or -ibi	-ibus or -ēbos
Abl.	-d or -tus	
Gen.	-is, -jus, -sis	-[r]um

EXAMPLE.

	Sing.	Plur.
Nom.	lapi[d]-s	lapid-[s]es
Accus.	lapid-e-m	lapid-e[m]s=lapidês
Dat.	lapid-ŷ-[bi]=lapid-î	lapi-ibus
Abl.	lapid-e-[d]	do.
Gen.	lapid-is	lapid-e-rum

It is not necessary for our present purpose to consider the differences of gender in the Latin noun, but our scheme for the Greek case-endings must have regard to these alterations.

234

(b) GREEK DECLENSION.

Singular.

	Masc.	Fem.	Neutr.
Nom.	-s	{ -σᾶ, -ιᾶ, -θ-s, -δ-s } { -ιᾶ-σᾶ, ιᾶ }	wanting
Accus.	-ν	-σᾶν, -θᾶ, -δᾶ, &c.	-ν, -τ
Dat.	-θι, -φι, -ι[ν]	-σᾶ-ι=σῆ, &c.	same as masc.
Ablat. or } Gen.	-σιο-ν, -θεν, -ωσ	-σᾶ-ιον=σῆς, &c.	do.

Plural.

	Masc.	Fem.	Neutr.
Nom.	-σες	-σᾶ-ες	wanting
Accus.	-νς	-σᾶν-ς, &c.	-ν-τ=α
Dat.	-ι-σι-ν	-σᾶ-ι-σιν, &c.	same as masc.
Ablat. or } Gen.	-σιον-ς, -ων	-σᾶ-ιον-ς, σᾶ-ων, &c.	do.

EXAMPLES.

(α) *Masculine.*

	Sing.	Dual.	Plur.
Nom.	λόγο-ς	} λόγω	λόγο-ι = λόγο-σες
Accus.	λόγο-ν		λόγους = λόγο-νς
Dat.	λόγω = λόγο-φι		λόγο-σι-ν
Abl. or } Gen.	λόγου = λόγο-ιο = λογό-σιο-ν	} λόγοιν	λόγων = λογο-σιον-ς

(β) *Feminine.*

	Sing.		Dual.	Plur.
Nom.	μοῦ-σᾶ	}	μού-σᾶ	μοῦ-σαι = μού-σαις
Acc.	μοῦ-σᾶν			μού-σᾶς = μού-σαν-ς
Dat.	μού-σῃ	}	μού-σαιν	μού-σαισι-ν
	= μού-σα-ι			μού-σᾶν = μού-σάν
	= μού-σα-φι			
Abl. or	μού-σῃς			= μου-σα-ιον-ς
Gen.	= μου-σά-ιον			

(γ) *Neuter.*

Nom.	}	κέρα-ς = κέρεντ	κέρατ-ε	κέρατ-α = κέρεντ-ντ
Acc.				
Dat.	}	κέρατ-ι = κέρεντ-ι	κεράτ-οιν	κέρα-σι = κέρεντ-εσσι
Abl. or		κέρατ-ος		κεράτ-ων = κέρεντ-εσιον-ς
Gen.	= κέρεντ-εσινον			

235 If we examine these cases, in the fullest forms to which they can be expanded, we shall not have much difficulty in convincing ourselves that the following is the simplest account of their origin and mutual relations. While the *nominative* is merely designated by the subjective *-s*, as a remnant of the pronoun expressing relative proximity, the *accusative* is simply marked by the objective *-n*, as a residuum of the pronoun denoting distance. A combination of these two is used to form the *genitive* or case of removal, which thus indicates motion from the near to the distant, and the *dative*, or case of rest, is indicated by an affix virtually the same as the genitive, but formally appearing as the preposition *in* (*Ἐνθά, φιν*, cf. *-φι* in *ἐμ-φί*, or *θι* of the gen. *-θεν*), which is the regular expression of definite locality. The breaking up of the genitive into two distinct cases—the ablative and genitive—in Latin and Sanscrit, and the resolution of the dative in the latter language into a dative, instrumental, and locative, or, if we please, the converse process of absorption in Greek, must be explained in the same way as the variety of prepositions, many of them identical in origin, to express the different modifications of direction and position in the case of those languages, which make a sparing use of inflexions, or have lost them altogether.

It will be observed that the plural masculine and feminine are formed by adding to the singular the letter *-ς*, and that the plural neuter is merely a reduplication of the singular *ν* or *τ*, the resulting combination *-ντ* being invariably softened in *ᾶ* (§ 114). As the accusative plural, masculine and feminine, does not reduplicate the objective *-n*, but adds to it the nominative *-s*, it is a reasonable conclusion that

in the plural, as in the feminine distinguished from the masculine (§ 228), the *s* is collective (§ 152) rather than merely subjective. And this prepositional value of the plural sign is illustrated by the fact, which we may claim to have discovered, that the Hebrew plural was similarly formed by means of the prepositions **עִם** and **אִתָּא** both signifying "together with" (see *Maskil le Sopher*, Cambridge, 1848, p. 13).

The dual presents abridged forms of the plural, the nominative and accusative being distinguished by a vague *-ε*, which is often absorbed, and the genitive or ablative and dative being both expressed by the same residuary ending *-υ*. The abridgment of *a-ses* into *ae* in the nominative plural of the Latin *a*-declension shows how the nominative and accusative dual have been merged in a single representative. But it is impossible that the genitive and dative dual can have sprung from any disintegration of those two cases in the plural or singular. It is clear that *-υ* for *-φιν* or *-φινς* is the plural form of the locative in *ι* or *φι*, just as the Latin plural in *-bis* or *-bus* stands by the side of a singular in *-bi*. But as the Greek genitive is strictly and properly an ablative, and as the ablative and dative plural are uniformly expressed by the same locative case-ending in Latin, we need not be surprised to find a similar neglect of case-distinctions in the mutilated dual of the Greek nouns.

236 We shall now discuss in detail all the cases of the Sanscrit declension, comparing them with the corresponding Greek and Latin cases, and pointing out what are the substitutions in those two languages for those Sanscrit cases which they have not.

(1) ACCUSATIVE.

The regular sign of this case is *m* in Sanscrit and Latin, and *ν* in Greek. It is well known that the laws of euphony, which prevail in the Greek language, do not permit the appearance of any labial at the end of a word. It would be of little use to seek for an explanation of this rule; and in the present instance there is reason to believe that the Latin and Sanscrit *m* are weaker forms of an original dental more truly represented by the Greek *ν*. The Sanscrit *m* of the accusative is generally transformed by *anusvāra* into a nasal *ṇ*; it is probable that the Greek final *ν* occasionally had the same sound, and that it then subsided into the broad *α*, which is so frequently its representative (above, § 114). Some such view is also necessary to explain the fact that the Latin final *m* is disregarded in prosody, and the vowel preceding it elided, when the following word begins with a vowel; so that this *m* is merely the nasal liquid in its ultimate state

of obscuration. Indeed Quintilian distinctly explains the *ecthlipsis* as a kind of *anusvāra*. He says (*Inst. Orator.* ix. 4, § 39): *Inde BELLIGERARE, PO' MERIDIEM: et illa Censorii Catonis DIEE HANC, æque M litera in E mollita: quæ in veteribus libris reperta mutare imperiti solent: et, dum librariorum insectari volunt inscientiam, suam confitentur. Atqui eadem illa litera, quoties ultima est et vocalem verbi sequentis ita contingit, ut in eam transire possit, etiamsi scribitur, tamen parum exprimitur: ut, MULTUM ILLE, et QUANTUM ERAT: adeo ut pæne cujusdam novæ literæ sonum reddat. Neque enim eximitur, sed obscuratur, et tantum aliqua inter duas vocales velut nota est, ne ipsæ coëant.* As an accusative case-ending, therefore, we must conclude that the Latin *m* and the Greek *ν* are traceable to a common origin, which is more truly represented by the Greek affix.

237 In Latin, Greek, and Sanscrit, the nominative and accusative of neuter nouns have the same termination. There can be little doubt that the true explanation of this phenomenon is that given by the late Mr. Coleridge, especially in its connexion with the fact that in Greek the neuter plural is generally followed by a singular verb. "The neuter plural governing, as they call it, a singular verb, is one of the many instances in Greek of the inward and metaphysic grammar resisting successfully the tyranny of formal grammar. In truth, there may be *Multeity* in things; but there can only be *Plurality* in persons. Observe also that, in fact, a neuter noun in Greek has no real nominative case, though it has a formal one, that is to say, the same word with the accusative. The reason is—a *thing* has no subjectivity or nominative case: it exists only as an object in the accusative or oblique case" (*Table Talk*, Vol. II. pp. 61, 2). It would perhaps have been better to say at once that both these facts depend upon the same principle, that there is, namely, no nominative case of neuter nouns, either in the singular or in the plural. The reason of this we shall see better when we come to explain the meaning of the termination of the nominative.

238 We must be careful to distinguish between the accusative in *-ν* or *-m* and the locatives in *-iv* or *-im* (*am*), which have been mentioned above (§ 170), and this discrimination is the more necessary because the accusative form is often used with a locative meaning. In Greek the adverbs *δίην*, *ἄκην*, &c. are clearly locatives in meaning, though in form they are perfectly analogous to accusatives. We may also compare the accusatives *μίν*, *ρίν*, with the recognised datives *ἐμίν*, *τίν*, *σφίν*, &c., and the Sanscrit instrumental in *ā* = *ana* and *ina* (§ 245). Moreover, it is well known that in a multitude of instances

the meaning of the Greek accusative is entirely locative: e. g. when it follows a neuter or passive verb. We find other examples of an apparent interchange of case-endings in the use of *-d* as the sign of the neuter accusative-nominative in *id*, *istud*, and the appearances of a similar ending in *ὄτ-τι*, &c. (Bopp, *Vergl. Gramm.* p. 183), whereas the *-d* was the ancient termination of the ablative in Latin, and also, as we shall show, in Greek. In all these cases, however, we must notice that the *meaning* of the particular case is explained by the syntactical idioms of the language; but that the accusative *form*, as distinguished from the locative *form*, has only a single letter, whereas the locative properly so called appends this letter, indicating objectivity, to the second pronominal element, expressing an approximate position. Thus in Greek, while the accusative is marked by *-ν*, or in neuter nouns by *-τ*, the locative in its full form is expressed by *-φι-ν* or *-θι-ν*.

239 With regard to the accusative plural we adopt without hesitation Grimm's opinion, that it is merely the accusative singular with the plural *s* superadded. The stems which end with a short vowel in Sanscrit form the accusative plural in *n*, with a lengthening of the final vowel of the stem: thus *vṛikāś*, "a wolf," makes accus. plur. *vṛikān*. If we compare this word with the Gothic *vulfans* on the one hand, and the Latin *lupōs* on the other, we shall perceive that the Gothic is the complete form, the Sanscrit and Latin having lost, one the *s*, the other the *n*, and both having supplied the loss by strengthening the final vowel of the crude-form. If we now take the Greek *λύκους*, which bears the same relation to *λύκος* that *ὄδους* does to *dens*, &c., it will appear, we conceive, that the same holds in Greek. We may add that *τύπων* for *τύπου(τ)ς* is analogous to *vṛikān* for *vṛikāns*. It will be observed, too, that 'in those cases where the accusative singular has lost its final *m*, *n*, and indeed in some others, the plural *s* is merely subjoined to the weakened form of the accusative singular; thus *τύπου(ν)τα* makes *τύπου(ν)τᾱς*.

240 In neuter nouns the accusative and nominative plural, which are, for the reasons above given, the same, always end in *-a* in Zend and in the old European languages of the family; but in Sanscrit we find an *i*, which, according to Bopp, is only a weakened form of an original *a* (*Vergl. Gramm.* pp. 5 and 269); the final vowel of the crude-form is lengthened, and "an euphonical *n*," as Bopp calls it, is inserted between it and the case-ending *i*. Thus *mādhū* (*μέθυ*), "honey," makes in the plural *mādhū-n-i* instead of *μέθυ-α*.

This appears to us a rather unscientific way of accounting for the

Sanscrit inflexion. A more accurate examination of the phenomena will enable us to reconcile the different forms by reproducing the structure in which they all originated.

We have already shown generally that the broad *a* represents an *anusvāra* or suppressed *n* (§ 114), and the final *n* in particular is constantly so represented in nouns of the third declension, as in $\phi\lambda\acute{\epsilon}\beta\text{-}\alpha$, $\pi\alpha\tau\acute{\epsilon}\rho\text{-}\alpha$, &c. Moreover, we have shown that even $\text{-}\nu\text{-}\tau$ may be represented by a solitary α , as in $\delta\acute{\epsilon}\text{-}\kappa\alpha$ for $\delta\acute{\epsilon}\text{-}\kappa\epsilon\nu\tau$ (§ 161), and we shall see that the formative $\mu\alpha\tau=\mu\epsilon\nu\tau$ becomes $\text{-}\mu\alpha$, as in $\sigma\tilde{\omega}\text{-}\mu\alpha$, &c. There would be no objection then, *à priori*, to regard the plural $\text{-}\alpha$ as a relic of $\nu\tau$; and if the objective ν or τ of the singular had to be formed into a plural analogous to that of the masculine nouns in $\text{-}\sigma$, which, we shall see, form their plural by a reduplication of the ending, we should be led at once to the assumption that the result would be the combination $\nu\tau$, or the reduplication $\nu\nu$. Now we have positive authority for the assertion that the neuter plural in Latin originally ended in $\text{-}ad$; thus we find in the *Senatus Consultum de Bacchanalibus*, l. 24: *quei advorsum ead fecissent*. Again, we find in Sanscrit, as we have seen above, an interpolated *n* in the terminations of neuter plurals, and the *i*, which follows it, is most probably the vocalization of a second *n*, just as conversely *nm* is substituted for *ni* (§ 215, *b*). Putting all these considerations together, we can hardly avoid coming to the conclusion that the proper and original plural of $i\text{-}d$ was $e\text{-}ad=e\text{-}nd$; that the genuine plural of *madhu* = *madhu-n* was *madhu-nñ*; and that $\xi\acute{\upsilon}\lambda\text{-}\alpha$ from $\xi\acute{\upsilon}\lambda\text{-}\nu$ represents a primitive $\xi\acute{\upsilon}\lambda\text{-}\epsilon\nu\tau$. Our view is still farther confirmed by the fact, that while the Erse plural of the third personal pronoun is *siad* (for *swiad*), the Welsh form of the plural is *hwynt* (for *swynt*)*.

241 We have before stated that the dual is merely a by-form of the plural. The nominative and accusative dual in Sanscrit are, as in Greek, the same. In some neuter nouns the dual nom., accus. are the same as the plural; in others there is an omission of the characteristic *n*. Thus *dāna*, "a gift," makes in the dual *dānē* = *dāna-i*, the plural being *dānā-n-i*; *vāchās*, "speech," makes in the dual

* That the anomalous forms *hæc* and *quæ* represent the original *hǣ-ce*, *quǣ-ce* has been proved elsewhere (*Varronianus*, p. 317), and it has been shown that this also explains the quantity of *anteā*, *quāpropter*, *posthāc*, &c. A writer, who can neither discover the truth nor recognise it when discovered, obstinately maintains that the long *a* in *antea*, &c. results from an absorption of *m*, and that the original forms were *anteam*, &c., "on the analogy of *postquam*, *antequam*, &c." Every Latin scholar is aware that *quam* is not here a case after *post* or *ante*, but the particle of comparison, so that the full form is, in fact, *posteaquam*, *antea-quam*, &c.

văchās-i, the plural being *vachāns-i*, where we have different compensations for a final *n*.

242 (2) NOMINATIVE.

The proper sign of the nominative case is *s*. In Sanscrit this sibilant is usually softened by *visarga* into *h*. In Greek and Sanscrit it is often absorbed in an *ā*-ending in feminine nouns; in Latin and Zend it is frequently dropt altogether in this case. When we recollect how constantly the final *s* is mute in modern French, we shall not wonder at these appearances of a similar insignificance of the same letter in the ancient languages. We find instances in old Latin of *s* concluding a short syllable though the succeeding word begins with a consonant, as in the *senio confectūs quiescit* of Ennius, which can only be explained by supposing a *visarga* of the nominative analogous to the *anusvāra* of which we have spoken above. There are reasons for supposing that this was the case in Greek also. Thus it is possible that the rule about the pause is not violated in Æschylus (*Persæ*, 321), as Porson thinks (*Suppl. ad Præf. Hec.* p. 33); we can easily imagine that Ἀριόμαρδος Σάρδεσι might be pronounced Ἀριόμαρδο Σάρδεσι. As to the objection that Ariomardus was a governor of Thebes and not of Sardis, we might as well object to Æschylus for saying in v. 301, that Arcteus was πηγαῖς Νείλου γειτονῶν Αἰγυπτίου, because the same Arcteus, by an amusing conversion, is called in v. 41 a governor of Lydia: ἀβροδαίτων δ' ἔπεται Ἀνδῶν ὄχλος—τοὺς Μιτρ. Ἀρκεύς τ' ἀγαθός—ἐξορμῶσιν. Quintilian, too, seems to have thought that the chief reason for the *visarga* in old Latin was to avoid a concourse of consonants similar to that in this passage of Æschylus. He says (*Inst. Orator.* ix. 4, § 37): *Ceterum consonantes quoque, earumque præcipue, quæ sunt asperiores, in commissa verborum rixantur, ut X ultima cum S proxima, quarum tristior etiam, si binæ collidantur, stridor est: ut ARS STUDIORUM. Quæ fuit causa et Servio (ut dixi) subtrahendæ S literæ, quoties ultima esset aliaque consonante susciperetur, quod reprehendit Lauranius, Messala defendit. Nam neque Lucilium putant uti eadem ultima, quum dicit, SERENUS FUIT, et DIGNUS LOCOQUE, et Cicero in Oratore (c. XLVIII.) plures antiquorum tradit sic locutos.* (We have here adopted the emendations of Rollin and Gesner; the books have *et S ultima cum X proxima*, which is nonsense.) If this view is well founded, we shall not wonder that a final letter, of little force in pronunciation, should in some cases be dropt in writing also. Such we find to be the fact in the feminine nouns of the first declension, where the termination *sa* is represented only by the length of the

final vowel, and in many masculine and feminine nouns of the third or imparasyllabic declension.

243 The explanation of this nominative sign is obvious and easy. The simplest form of the third personal pronoun in the Indo-Germanic languages is, we have seen, in Sanscrit *sa-s, sâ, tad*; in Greek (σ)ο, (σ)η, τό; in Goth. *sa, sô, thata*. It is observed by Bopp (*Abh. Ak. Berl.* 1826, p. 66), that although there is such a great number of crude-forms in the Greek language ending in -ο, there is not one which wants the nominative sign *s* except this pronoun. A similar remark applies to the Gothic language. There must be some very good reason for this exception. We notice that, in modern German, when the adjective has an article prefixed, it is declined according to a weaker form, in other words, it does not preserve the declension which it exhibits when not preceded by an article; thus we have *gute-r Wein, gute-m Wein*, "good wine," "to good wine;" but *de-r gute- Wein, de-m gute-n Wein*, "the good wine," "to the good wine;" the case-ending of the article not being repeated in the adjective. Conversely, we find in Greek that the case-endings are preserved in the noun or adjective, but not in the nominative masculine of the article. Thus we have δ (= σο) ἀγαθὸς ἄνθρωπος, not $\delta\varsigma$ ἀγαθὸ ἄνθρωπο. When, however, this pronoun assumes a distinct personality, it takes to itself a nominative ending like another noun; thus, δ ἄνθρωπος $\delta\varsigma$ τὰντα ποιεῖ, "the man who makes these things" = "the man, he (i. e. this man) makes these things." We have before remarked that in the article it is only the nominative, masculine and feminine, of the demonstrative pronoun which exhibits the form δ , η , or, substituting the sibilant for the aspirate, σο, ση; the other cases present a form beginning with τ, as nominative-accusative neuter τό; gen. τοῦ, τῆς, τοῦ, &c.: whereas in the relative, as it is called, the form beginning with an aspirate is used for all cases and genders. Now this relative expresses distinct personality, or a subject, in the masculine and feminine genders (that there is no subject or nominative in neuter we have before seen); but when this pronoun is used merely as a prepositive article, it of course expresses personality or subjectivity only in the nominative case, for in that case only can the name of any *object* be considered as a *subject*; this is the reason why all cases and genders of the article δ , η , except the nom. masc. and fem., assume the objective form in τ-. We have shown before that, of the three fundamental pronouns, the first represents the *here*, the second that which is *near to the here*, the third the mere object; we have also seen how in the idea of nearness the second pronoun in-

cludes the relative and reflexive pronouns as opposed to the mere demonstrative, and that it is also used to form a nominative case to the third pronoun; we now see that this element under the form *sa* represents *subjectivity* as opposed to *objectivity*, and is for that reason used as a sort of post-positive article to note the nominative case.

244 The plural nominative ending in Sanscrit is *-as*, which we might be content to explain with Bopp (*Vergl. Gramm.* p. 261), by considering it "as an extension of the singular nominative sign *s*, so that there lies in this extension of the case-suffix a symbolical indication of plurality." For this we generally find the ending *-εs* in Greek. In the first and second declensions, however, the nominative plural is *-αι* or *-οι*. It is nearly demonstrable that the final *i* in these instances, as well as in Latin, has supplanted an original *s*, a remark which applies also to the Latin genitives of the first declension; thus for *familice*, *familiai*, the common forms, we have also *familiās*=*familia-is*. We have no hesitation in asserting that *λύκο-ι*, *χῳρα-ι*, stand for *λύκο-εs*, *χῳρα-εs*, and that the Latin fifth declension in *s* differs from the first declension in *a* only in the termination of the crude-form (Bopp, *Vergl. Gramm.* p. 263). That this *-εs* presumes an original *-σεs*, appears, in part at least, from the following considerations (see also *Varronian.* pp. 278 sq.). As the accusative plural is formed from the accusative singular by adding *s*, we may be justified in supposing that the plural nominative is formed from the singular by the same addition; and as a double *s* is not allowed at the end of a word in these languages, we must conclude that the plural *s* was joined to the singular by the intervention of a short *ẽ* or *ǎ*, so that in all probability the original form of the plural nominative of *ἰχθύς*, for instance, would be *ἰχθύς-εs*, which is practically shortened into *ἰχθύες*, as *ἐλέγεσο* is into *ἐλέγεῶ*=*ἐλέγου*, &c. (comp. Bopp, *Vergl. Gramm.* p. 220).

In our own and other modern languages we find *n* as well as *s* the sign of the plural. In the verb-endings in Greek we find the plural *-μεν* instead of *-μεs*. We shall discuss this in the proper place.

245 (3) *a.* IMPLEMENTIVE OR INSTRUMENTAL.

b. DATIVE.

c. LOCATIVE.

We shall consider all these three cases together, because we believe that their meanings spring from the same source, and because these meanings are all represented by the same case in Greek, that, namely, which we call the Dative.

In Sanscrit the instrumental singular is marked by an ending *ā* or *ina*, the latter ending being appropriated to nouns the crude-form of which ends in a short vowel. The termination *ā* is considered by Bopp (*Abh. Ak. Berl.* 1826, p. 77; *Vergl. Gramm.* p. 188) to be identical with the preposition *a*, which is elsewhere used as a prefix, with the signification "on," and which must be a residuum of *a-na*. The prepositions *in*, *ἐν* (cf. *ἴνα*), have the same meaning, and involve the same pronominal elements (above, § 170). Hence, the instrumental in *-ana* or *-ina* and the locative or dative in *-in* (§ 238) are traceable to a common origin. That the idea of an instrument or cause may be included in that of position or containing, is obvious; and that a preposition, the intention of which is originally (as indeed is the case with all prepositions) to denote position, can be used as a word marking an instrument or cause, is clear from the functions of *διά* and *ἐπὶ* in Greek, and *per* and *ob* in Latin. The phrase *ἐν χειρὶ*, *cominus*, "in close fight," sufficiently points to the connexion between immediate proximity and the active use of an implement. The sign of the dative in Sanscrit is *ē=ai* or one of its longer forms *āi* or *aya*. The termination of the locative singular is in most cases *i*, so that the dative is only an extension of the locative. The masculine nouns in *i* and *u*, and sometimes also the feminines, have an anomalous locative ending in *āu*; in this case the final vowel of the crude-form is thrown off, or changed into *y*, as in *patyāu*, *sakhyāu*, from *pati*, "a master," *sakhi*, "a friend." Bopp supposes (*Vergl. Gramm.* p. 228) that *āu* stands for *ās*, and he recognises a connexion between the genitive and locative both in Sanscrit and Zend. We prefer considering the *u* as a relic of the ending *bhi=q*. Compare the Greek locatives *αὐτοῦ*, *οῦ*, &c. for *αὐτό-φι* or *αὐτό-θι*, *ὄ-θι*, &c.; and in the Latin *humi*, *domi*, *militiæ*, *Corinthi*, &c., the locative has accidentally assumed the same form as the genitive. In the Sanscrit dual, the genitive and locative 'are identical; they both end in *ōs*. The instrumental and dative dual are identical with each other and with the ablative. The termination is always *-bhyām*. In the plural, the implementive ends in *-bhis*, the dative and ablative in *-bhyas*, and the locative in *-su* or *-shu*. These confusions are more than paralleled in Latin.

246 It now remains to inquire what is the relation, in form or otherwise, between these cases and the Greek dative, in which their meanings seem to be included. The characteristic of the Greek dative singular is *-ι* for *-φι* or *-θι*; of the dative dual *-ιν*, it being identical with the genitive of that number; of the dative plural *-ισι* or *-ις*. Bopp has remarked (*Abh. Ak. Berl.* 1826, p. 78) that the Sanscrit pre-

position *â* (= *ana*) and *abhi* (= *anabhi*, § 172) are synonymous; that the former constitutes the singular instrumental ending, the latter, with an end-syllable *-âm*, the dual *-bhyâm* = *bhi-âm*, and, with the end-letter *-s* or end-syllable *-as*, the plural *-bhis* or *-bhyas*. The dative and locative singular present *abhi* under the different forms of *ai* and *i*, the former standing for *abhi* just as *tais* does for *tâbhis*, and the latter for *bhi* just as *αὐτώ-ι* does for *αὐτόφι*, *αὐτό-ιν* for *αὐτό-φιν*, and *αὐτό-ις* for *αὐτό-φις*. The terminations of the Sanscrit implemmentive, dative, and locative, are therefore resolvable into synonyms analogous to the Greek *ἀνά*, *ἐμ-φί*, and *-φι*. The Latin *ti-bi*, *vo-bis* present us with the form *-φι* and its plural variation; and the termination *-(φ)ιν* bears the same relation to *-φις*, that *-μεν*, in the verb-ending, does to *-μες*, the other form. We have before remarked, that the letter *n* is the most striking mark of the locative, and that we find this letter at the end of locatives of all numbers. The *ν* *ἐφελκυστικόν*, then, which we so often see at the end of Greek datives plural, is not a merely arbitrary addition, but a real part of the word, dropt according to laws of euphony in the newer language. The *anusvâra*, or nasal at the end of the plural locative in Pracrit, points to a similar final *n* in that language. For the Sanscrit *su*, *shu* we find *shva*, *hva*, in Zend, from which Bopp not unreasonably concludes (*Vergl. Gramm.* p. 288), that the original form of the Sanscrit plural-locative ending may have been *sva*, and this leads us at once to the reflexive pronoun *sva*, Greek *σφε*. The relationship between *σφιν*, the locative of this pronoun, and the locative ending *-φι*, *-φιν*, is clear from what we have said in a former chapter (§§ 110, 121). The termination of the dative plural in Greek is generally *-ι-σιν*. We have a similar form in Sanscrit. Thus *vṛikā-s* makes locative plural *vṛikê-shu* = *vrika-i-shu*. At other times the crude-form is not thus altered. This is the rule in Sanscrit feminine nouns. Thus *jihvâ*, "a tongue," makes *jihvâsu*. It also holds in certain Greek words, as in the feminine *Ἀθήνησι*, *Ὀλυμπιάσι*, *θύρᾱσι*, &c., and even in masculines, as *ταμῖάσι* (Böckh, *Corpus Inscript.* i. p. 80). As the penultimate vowel, however, is invariably long, it is probable that the dative singular is included or absorbed in the form to which the plural affix is appended. Putting all these facts together, we may come with tolerable safety to the following conclusions:

(1) That the locative or dative singular in Greek is formed of the same elements as the prepositions *ἐν* or *ἀνά*, namely, *Ἔνα* or *σφα-να*, which may appear as *φι*, *θι*, or *ι*.

(2) That the plural of this form is really a reduplication of the singular, or at least includes its characteristic *i*; for the termination

-*ων* is shown by the Zend forms to have been *σφιν*. The objective *ν*, however, was not repeated, but appeared only at the end of the complex plural form. It is to be observed that the termination -*φι* is used by the epic and sometimes by the lyric poets to denote a genitive, dative, and even an accusative, with or without a preposition. Thus *κεφαλῆφιν* is a genitive in Hom. *Il.* xi. 350; we have *ἀπὸ νευρῆφιν* in *Il.* viii. 300; *δακνύοφι* is a genitive plural in *Il.* xvii. 696; and we have *ἐκ θεόφι* for *ἐκ θεῶν*, *Ib.* 101, xxiii. 347; as a dative singular we have *ἔμ' ἡοῖ φαινομένηφιν* in *Il.* ix. 618; as a dative plural with a preposition we have *σὺν ὄχεσφι* in *Il.* xvi. 811; and as an accusative we have *ἐπὶ δεξιόφιν* for *ἐπὶ δεξιά* in *Il.* xiii. 307. Perhaps as in the adverbs *νόσφι*, *λιγριφίς*, &c. the general expression of locality had in these instances superseded the proper distinction of case, and it is remarkable that this confusion is particularly apparent in the syntactical use of this case-ending. Otherwise we could hardly have had the identification of genitive and dative in the Greek dual, of the dative and ablative in the Sanscrit plural, and of the dative and ablative in the Latin noun of both numbers.

247 (4) α. ABLATIVE.

The plural ablative in Sanscrit has the same termination as the dative; the dual ablative is identical with the instrumental as well as with the dative. The connexion in meaning between the dative and instrumental cases we have just shown. The Sanscrit ablative properly expresses removal from a place, *i. e.* it answers to the question "whence." It will easily be perceived how this might be resolved into the idea of a cause or instrument, and also how the same meaning might be made applicable to the ordinary use of a dative; for instance, "I give to him" might be represented by "I give through him," or "he is the cause as well as the object of my giving," for in such cases the object *to whom* is very often the cause *by which* (*Gr. Gr.* Art. 457). In Greek, the use of the dative to signify the occasion or instrument is but little different from that of the adverb of manner; and this adverb, as we shall see presently, is a residuum of the ablative, which is similarly used in Latin.

The characteristic of the ablative singular is -*t*, when the crude-form of the noun ends in *ᾱ*; in other declensions it more nearly resembles the genitive, to which also it corresponds in meaning. The English writers on Sanscrit grammar consider -*ât* as the termination, but Bopp rightly concludes (*Vergl. Gramm.* 209), from the analogy of *mat*, *tvat*, the ablatives of the first and second personal pronouns, and of the Zend ablatives, that the ablative-ending is merely the letter -*t*.

We find this termination in the Latin *met* = Sanscrit *mat*, which

appears in the combinations *egomet*, *memet*, &c., and in the conjunction *se-d*, more anciently written *se-t*. Under the form *-d*, this ending appears as the regular characteristic of the ablative in old Latin. Thus, on the *Columna Rostrata* we have: *præsentēd sumod dictatored olorom in altod marid puegnad vicet* (*Varronian*. p. 229).

It is to be remembered, that in Latin the same letter appears as the characteristic of the neuter-objective singular as in *id*, *illud*, &c.; also, as has been mentioned above (§ 239), in the neuter plural; thus, in the *Senatus Consultum de Bacchanalibus*, we have *quei adversum ead fecisent*; and as *me*, *te* (anciently *met*, *tet* or *med*, *ted*) are used both as accusatives and ablatives, so *sed*, which appears as an ablative in its conjunctive use, is an accusative in the *senatus consultum* just mentioned, where it appears after *inter*.

The only instance in Greek of a near approximation in form to the Sanscrit ablative in *-t*, Latin *-d*, is to be sought in the adverbs in *-ως* as they are called. We find the ablative *-d* at the end of adverbs like *bened*, *facillumed*, which are clearly the old ablatives *bon^(2u)d*, *facillum^(2u)d*. In the same way *οὔτως*, *καλῶς*, &c. are the old ablatives of *οὔτος*, *καλός*, &c.; for in the Greek language euphony will not allow the appearance of a *δ* or *τ* at the end of a word, and *ὁμῶς* bears the same relation to its Sanscrit synonym *samât* that *δίδωσι* does to *dadâti* (Bopp, *Vergl. Gramm.* p. 205).

We have before seen this termination of the ablative under the Latin form in the adjective *ἰδ-ιος*, and we shall meet it again in the forms *μοιρί-διος*, &c. and in patronymics like *Ἀτρείδης* = *Ἀτρεΐ-διος*, &c. A comparison of *Ἀφροδίτη* with the Sanscrit *abhrâditâ*, "she who comes out of a cloud" (from the ablative *abhrât*, written *abhrâd* in composition, and *itâ*), shows that the first part of the word is an adjective equivalent to the ablative of *ἄφρος*, which should be *ἄφρωδ* or *ἄφρως*; the included form *ἄφροδι-* from *ἄφροδιος* is indicated by the succeeding long vowel, which would otherwise have been short: comp. *ἦτης*, *ἦταμος*, &c. (Bopp, *Vergl. Gramm.* p. 216, note). We shall see directly that this fuller form of the ablative is neither more nor less than the genitive.

248 (4) b. GENITIVE.

The endings of the genitive singular in Sanscrit are *s*, *syâ*, *as*, and *âs*. The latter is appropriated to feminine nouns which end with a vowel; thus *priti-s*, "love," makes *prityâs*. When the final vowel of the feminine stem is long, this termination is invariably preceded by *y* or *v*, as *jihvâyâs*, *vadhvâs*; when the final vowel is short it is optional whether we write a *guna* of the vowel and the simple *s*-ending, or the full ending in *yâs*. Thus, we may have from *priti-s* not only

prītyās, but also *prītēs* = *prīt-a-i-s*. The termination *y-ās* is represented under a weakened form by the Latin *j-us* in *cujus* for *quo-i-us*, &c. The terminations *s* or *ās* are used according as the stem ends with a vowel or a consonant. In the former case the termination may still be considered as *-as*, for the vowels *i* and *u* are always affected by *guna* in the genitive: thus *patis*, "a master," makes *patēs* (= *pat-a-i-s*), and *sūnu-s*, "a son," makes *sūnós* (= *sūn-a-u-s*). In all these instances the genitive corresponds to the ablative. When, however, the ablative ending is *-at*, the genitive ends in *-sya*: thus *vṛika-s* makes ablative *vṛikāt*, genitive *vṛikasya*. We observe that this genitive ending, which is peculiar to the Sanscrit declension in *ā*, does not affect the final syllable of the stem with *guna*: it is also probable that the *guna* of the final syllable in the ablative of this declension, and the genitive and ablative of other declensions, is occasioned by the loss of some final vowel or vowels, as in *Ἀφροδίτη* mentioned above. Since, therefore, there is no reason why the genitive and ablative should be different in the first, and identical in the other Sanscrit declensions, we should be induced, *à priori*, to conclude that the genitive and ablative of the first declension are to be considered as merely by-forms of one another. And as the Greek genitive, either with or without a preposition, expresses all the significations of the Sanscrit genitive and ablative, it is reasonable to expect that the forms must ultimately coincide. An examination of these forms, compared with those of the Sanscrit ablative and genitive, will enable us to prove, in opposition to Bopp (*Abh. Ak. Berl.* 1826, p. 97), that these cases spring from a common origin.

In classical Greek there are three forms of the genitive which are more prominently different, that of masculine nouns of the first declension, of which the Homeric form is *-ā-o* (*Βορέᾱ-o*, *Αἰνείᾱ-o*, &c.)*; that of nouns of the second declension, of which the Homeric form is *-οιο* (*λύχ-οιο*, &c.); and that of *ι* and *υ* nouns of the third declension in *-εως* (*πόλ-εως*, *βασιλ-έως*, &c.)†. That the first of these originally included a digamma is proved by the Corcyraean inscription (*Trans. of Phil. Soc.* i. p. 150, above, p. 218), in which we have the genitive *Τλαστιάφο*, and we find the same form with an *s* appended in the

* In these forms the *ā* belongs to the crude-form of the declension, and there is no evidence whatever for Bopp's assertion (*Vergl. Gramm.* p. 220) that *α-o* stands for *α-ιο* = *α-σιο*.

† That the shorter genitive in *-ος*, which is found with most nouns of the third declension, is a mutilated form, may be inferred from the genitive and dative of monosyllabic nouns, e. g. *ποδός*, *ποδί*, *ποδῶν*, *ποσί*, as distinguished from *πόδα* and *πόδες*. The Sanscrit *pādas* and *padās* are distinguished only by the accent (see above, § 222).

inscription on the tomb of Midas (above, p. 155). The appearance of *ΛαΦονόφων* on an old inscription known to Priscian (i. pp. 23, 265 Krehl), a comparison of *λαός*, *ναός*, &c. with *λέως*, *νέως*, &c., and the obvious fact that in Homer *έως* must have been *ἄφος* (*Varron*, p. 288), would lead us to conclude that *πόλεως*, *βασιλέως*, &c. are similarly related to an original *πόλεφος*, *βασιλέφος*, &c., and we actually find the genitives *πόληος*, *βασιλήος*. Then, again, the derivative adjective *δημόσιος* would induce us to conclude that the genitive *δήμοιο* was originally *δημόσιο* (Bopp, *Vergl. Gramm.* p. 294, note), the *σ* being dropt, as in *ἐδίδον* compared with *ἐδίδοσο*, &c. (above, § 114); and thus *τοῖο*, *λύκοιο* would ultimately correspond in form as well as meaning with the Sanscrit *tasya*, *vṛikasya*. We have therefore only two forms for the Greek genitive, one in *-φος* or *-φο* and the other in *-σιο*, and these unite in the form *σφο-*, Sanscrit *sva*. That *σι* may represent *f* appears as an undoubted fact, after the analysis to which the pronominal elements have been submitted. And if we compare *δημόσιος* with *ἴδιος*, a possessive of the same kind, and remember that *ἴδιος* bears the same relation to *ἴσος* = *ἴσφος* that *medius* does to *μέσσος* = *μέσιος*, we shall see that the ablative *vṛikāt* = *vṛikātya* = *vṛikasya*, and that *prītyāt* = *prītyās*, so that the genitive and ablative are identical in Sanscrit as they are in Greek.

249 The genitive-ablative relation is also expressed by *-θεν* in Greek. The connexion of this suffix with the Latin *-tus*, Sanscrit *tas*, *thas*, *das*, *dhas*, we have already pointed out; and it will easily be seen what relationship subsists between *humanit-us* and the proper adverb *humaned* (comp. *bened*, &c. in the *Columna Rostrata*), or between *οὐρανόθεν* (^{εὔ}_ε) and the genitive *οὐρανό(σ)ιο*. In point of fact, the terminations *-θεν* and *-σιο* are only different modifications of one and the same form. We often find that *θε* = *σι*, e.g. in *θεός* = *σιός*. And while the vowel, which followed the palatal of which *θε* or *σι* is the representative, has been lost in *-θεν*, *σιο* has parted with its final nasal, which is so often seen to be removable. This observation points the way to an interesting and instructive analogy. We cannot doubt that adjectives in *-ιος* = *-σιος* are formed from the genitive *-ιο* = *-σιο*, and we have seen (above, § 165), that these adjectives correspond in signification to the quasi-comparatives in *-ων* = *-ιον-ς*. If, as there is every reason to believe, these latter are older, stronger, and more complete forms of the adjectives in *-ιο* = *-σιο*, it is a just inference that *-ιον* = *-σιον* = *-φο-ν* was the fullest and most original form of the genitive case.

250 This view is confirmed by the Greek genitive plural, which is otherwise an inexplicable phenomenon. According to all reasonable

expectations, the genitive plural ought to be derivable from the genitive or ablative singular by the addition of *-s*. In common Greek the genitive plural consistently ends in *-ων*, which is immediately attached to the crude or uninflected form; the circumflex however in the first declension points to an original form in *-ᾶ-ων*, which is still found. But if *Ἀτρείδ-α-ο* = *Ἀτρείδ-α-σιον*, still more easily do we pass from *Ἀτρείδ-ᾶ-ων* = *Ἀτρείδ-ᾶ-ον-ς* to *Ἀτρείδ-α-σιον-ς*. This result receives a further support from the analogy of the Latin and Sanscrit. Although in common Sanscrit nouns the genitive plural ends in *-nām* or *-ām* only, the pronouns, which generally preserve the authentic forms longer than the nouns, give us *-sām* or *shām*, as in *tê-shām* = *horum*, *tâ-sām* = *harum*. Now this fully accords with the Latin; for *-rum*, which is the proper and genuine termination of the genitive plural, not only in the vowel declensions, but also in the others (Varro, *L. L.* viii. § 74; Cn. Gell. *ap. Charis.* i. 40), must have been originally *-sum*, and this points to an older *-sôm* corresponding to the Sanscrit *-sām* (Müller *ad Varron. L. L. u. s. p.* 192). It is not easy to arrive at any certain conclusion respecting the *n* which appears in many Sanscrit genitives; but when we find the more easily explicable form in the pronouns, it is reasonable to conclude that this nasal or nasal guttural is, like the Latin *r*, a corrupt representative of the original *sy-*, Persian *hy-*. The passage from the palatal *y* or *j* to a sound like the Hebrew *Ayin* is very conceivable. At all events, any thing is better than, with Bopp, to import a foreign difficulty into the Greek language, by supposing that *λύκων* is a representative of *λυκό-ν-ων*, the *ν* being dropt as in *μείζω* from *μείζονα* (*Vergl. Gramm.* p. 286, note).

251 (5) VOCATIVE.

The vocative is either the crude-form of the noun, the vowel being generally represented by the lightest sound *ε*, *ῆ*, or the same as the nominative. Thus in the first declension, *ταμῖα-ς* makes *ταμῖα*, *κρητή-ς*, *κρητά* in the vocative. In the second declension, *λόγο-ς* makes *λόγε*. In the third declension the vocative *Σώκρατες* implies the included *κράτος* of the true crude-form, and its relation to the nom. *Σωκράτης* is the same as that of the neuters *εὐήθες*, *εὐδαίμων*, &c. to their masc. and fem. *εὐήθης*, *εὐδαίμων*, &c. The nominative case corresponds to the third person of the verb; it presumes a subject spoken of. The vocative corresponds to the second person; it presumes a subject spoken to. We believe that the nominative was secondary to the vocative; the idea of a subject in its objectivity being suggested by conversation with another subjective reasoning being; and for this cause the sign of the nominative case is identical

with the element of the second personal pronoun. In the second person of the imperative mood, where the person spoken to is most directly and impressively addressed, we find sometimes the crude-form of the verb as *τύπτε*, at other times the element of the second personal pronoun more strongly expressed, as in *κλῦ-θι*; for the other persons of this mood a stronger form is invariably adopted. The vocative *λύκε* stands related to the imperative *τύπτε* just as the nominative *λύκο-ς* does to the indicative *τύπτεῖς* for *τύπτε-σι*.

The accentuation of the vocative in the third declension, when the crude-form is terminated by a consonant, and the nominative properly had its last syllable long by position or absorption, presents some phenomena, which are very instructive when properly examined and analyzed. The technical writers on accentuation are contented with saying (Göttling, *Elements of Accentuation*, § 26, p. 53, Engl.Tr.) that "no vocative of the third declension is oxytone, if it be really distinguished from the nominative by a peculiar form, because, being the oldest form of the nominative, it follows the oldest Æolic accentuation, which recognises no oxytone. Those only in *ις* and *υς* remain oxytone." To the comparative philologer this rule is simply an evasion of the difficulty, coupled with a misrepresentation of the facts. That the vocative is not in any sense a form of the nominative, and that the Æolic tendency to draw back the accent has nothing to do with the difference between the intonation of the vocative and that of the nominative, may be inferred from the following circumstances. We do not find that the accent is drawn back, even when the last syllable becomes short, in those cases in which the crude-form was originally terminated by two consonants. Thus a participle like *παιδεύων* was *παιδεῦον* in the vocative, not *παίδεον**, because the crude-form was *παιδεύοντ*, just as the third person plural of the imperfect was accented *ἔλεγον*, *ἔφάσαν*, &c. (Ahrens, *de dial. Dor.* pp. 28 sqq.) on account of the original termination in *ντ*. Again, although barytone compounds regularly draw back their accent in the vocative—as *Ἀγάμεμνον*, *Δημόσθενες* from *Ἀγαμέμνων*, *Δημοσθένης*—this does not apply to compounds in *-φρων* and *-τωρ*, because the secondary crude-form does not revert to the original form of the included word, but retains enough of the modified syllable to affect the intonation; hence we have *βαρύφρων*, *καρτερόφρων* from *βαρύφρων*, *καρτερόφρων*, not *βάρυφρεν*, *καρτέροφρεν*, that form being lost in the composition; and similarly, *προπάτωρ*, *αὐτοκράτωρ* from *προπάτωρ*, *αὐτοκράτωρ*, not *πρόπατερ*,

* G. Curtius, who as usual follows us, adds that we have *ὑπάρχον* not *ὑπαρχον* (*Sprachevergleichung*, p. 16). He does not seem to be aware that this is owing to the parathetic composition.

αὐτόκρατερ, because the primitive form has yielded to the formative process. Exceptional instances in the accentuation of the vocative seem to belong to words, in which the accent was affected by a peculiar urgency or familiarity of the invocation. Thus we have the precativ exclamations, Ἄπολλον, Πόσειδον, σῶτερ, nom. Ἀπόλλων, Ποσειδῶν, σωτήρ; the naval cry to the steersman, κυβερνᾶτερ, nom. κυβερνητήρ; the address of near relatives, as πάτερ, ἄνερ, θυγάτερ, δᾶερ, εἰνατερ, nom. πατήρ, ἀνήρ, θυγάτηρ, δαήρ, εἰνάτηρ. With this change of accent we may compare the exclamation, ἄληθες, "indeed!" from ἀληθής*.

* This drawing back of the accent is observable in Sanscrit also, where it is similarly explicable (Bopp, *Vergl. Accentuationssystem*, p. 20).

CHAPTER III.

THE PRONOMINAL TERMINATIONS OF THE UNINFLECTED FORMS.

252 Derivation-suffixes of pronominal origin. Their classification and meaning. 253 (1) *Forms with the first element only.* 254 (2) *Forms with the second element only.* 255 (3) *Forms with the third element only.* 256 (1a) *Terminations compounded of the first and other elements.* 257 (2a) *Terminations compounded of the second and other elements.* Nouns in -ύς, -ώς. 258. Nouns in -σν-νῆ, -ι-νος, &c. Ἀληθινός. 259 Nouns in -ιτης, -ιτης, &c. 260 Collective nouns in -ων. 261 (3a) *Reduplications of the third element.* 262 (2b) *Second element as -δ or -θ.* Patronymics, comparatives, and participles. 263 Adverbs in -δην, &c. 264 Adverbs in -τι, &c. 265 Connexion of these forms. 266 (3b) *Third element as λ- or ρ-.* Identity of these forms. 267 Also of the forms τ-λος, τ-ρος- &c. 268 Reasons for believing that the forms λ- and ρ- are derived from -να, both from their use as pronominal syllables; 269 and from their employment as verbal roots: 270 especially in expressing the ideas of progressive time and recurrence.

252 **T**HE root of a noun or verb, which properly speaking never exceeds a single syllable, may, as we have said before, be considered as the independent variable; the noun or verb is a function of this variable, and contains, besides the root, in the former instance, a set of case-endings, in the latter a set of person-endings, both of pronominal origin. But between these case- and person-endings we find, frequently in the verb, and generally in the noun, a derivation-suffix. Having discussed the case-endings of the noun, we proceed to the consideration of these derivation-suffixes, which determine the class the noun belongs to, and declare the particular modification of meaning with which it is used. Of the prefixes, which express the relation in space that the noun is supposed to bear to the other words in the sentence, we have spoken under the head of the prepositions. We do not intend here to mention those compound words which contain two or more distinct verbal or nominal roots. We shall confine ourselves to those suffixes which are of pronominal origin, and which may therefore be considered as the constants of the function; compound words are, as it were, functions of two or more variables.

In these pronominal suffixes we observe all the peculiarities which we have noted in the pronominal elements separately

considered; there is not one monosyllabic or primary pronoun which does not appear as a termination, and scarcely one combination of monosyllabic pronominal elements which is employed independently but is applied to this purpose. But though we can most clearly trace the pronominal elements in these formations, it is scarcely possible to assign to them a definite meaning on all occasions, any more than we can translate literally all the long compound pronouns. That they had a distinct signification at one time cannot be doubted, and it is at least useful, for the purpose of classification, to arrange the terminations according to the significant pronouns to which they externally correspond, even though we are not always able to assign to them, in their use as suffixes, a meaning perfectly and perceivably identical with that which they bear when used independently.

The three primary monosyllabic pronouns are, as we have seen, (1) *pa* (*ma*); (2) *qva* or *Fa*; and (3) *ta*: the first expresses the idea of "here;" the other two are modifications of the idea of "there," distinguished according to the relative nearness or farness of the object. These primary words are, we have seen, compounded with each other, and otherwise modified, in a great variety of ways. The second admits of the greatest number of modifications; its original and proper element *Fa* or *qva* becomes *sva*, *va*, *sa*, *hva*, *ha*, *ka*, *pa*, *ga*, and *ya*; and the sibilant passes into the dental articulations *dva*, *da*, *tva*, *tu*, &c. The third is changed only into *na*. Any one of these stems may be strengthened or rendered more emphatic by the addition of the affix *-ra* or *-la* derived from *na*. The Sanscrit vowels and diphthongs *ā*, *â*; *î*, *ĩ*; *ê*; which are all used as pronouns in composition, are only initials.

In the formation of nominal derivatives in Greek, we observe generally that the *first* pronominal element expresses that the thing proceeds from, or immediately belongs to, the *subject*; the *second*, that it has a *relation to the subject*; the *third*, that it is a mere *object*, or something removed from the proximity of the subject.

253 (1) *Forms with the first pronominal element only.*

The termination *-uo-s* masculine, *-uη* feminine, is generally found with a class of nouns which represent the action of the verb proceed-

ing from the subject, and may be expressed by the infinitive active used as a noun: thus *σεισ-μό-ς*, "the shaking," = *τὸ σείειν, ποτ-μός*, "the falling," = *τὸ πίπτειν* (root *πετ-*); or the thing in which the action of the verb is exemplified; as *δῆ-μος, δη-μός*, "that which binds," i. e. either an inclosed field or village (like the English "toun" from "twine," which signifies both a field and a town), or the fat in which the thighs were wrapt up for sacrifice; *ῥετ-μός, rê-mus*, "that which rows," &c. The same meaning may be observed in *μνή-μη*, "a recollecting," *ἐπιστή-μη*, "an understanding," &c. We cannot agree with Buttmann (*Ausführl. Sprl.* § cxix. 22) in thinking that the ending *-μη* is ever really equivalent to *-ματ=μεντ*; but cases may occur, in particular nouns, in which the termination *-μη* or even *-μος*, representing, as these endings do, the mere action of a verb, expressed by its infinitive, may seem tantamount to the complex and secondary affix *μα=μεντ*, expressing the act or result of the action. Such for example is the true explanation of the phrase, *Phil.* ii. 6: *οὐχ ἄρπαγ-μὸν ἡγήσατο τὸ εἶναι ἴσα θεῷ*, "he did not think that the being equal with God was an object of eager desire," where some would expect *ἄρπαγμα* (Heliodorus, *Æeth.* vii. 20). For we have precisely the same idea in the phrase, *Pind. Pyth.* x. 62: *τυχῶν κεν ἄρπαλέαν σκέθοι φροντίδα τὰν παρ ποδός*, "he would make much of, be contented with the thought of the moment;" and we have *ἄρπαλέα δόσις* in *Pind. Pyth.* viii. 63, meaning "a gift to be eagerly desired:" and though the termination *-σις* is quite as abstract as *-μος*, this word *δόσις*, which has become fixed in our English "dose," is used by the oldest and best writers to signify "a giving" with reference to the recipient rather than to the giver; thus we have of the alms given to a beggar (*Hom. Od.* vi. 208): *δόσις ὀλίγη τε φίλη τε*. In the same way nouns in *-μος* are used to express an act quite as much with reference to its accomplishment as with reference to its origin or continuance, for *χρησ-μός*, "an oracle," is something actually delivered, and *θεσ-μός*, "a law," is not so much the act of law-giving as its consequence. We find the common ground of these meanings in the verbals in *-τέος, -τός*, which though originally expressions for the active infinitive are used in a manner which leads to their being confused with the passive. Thus, to return to *ἄρπαγμός*, we have just the same idea in *ἄρπακτός*, as used by Hesiod, *ἔ. κ. ῥ.* 320: *χρήματα δ' οὐχ ἄρπακτά· θεόσδοτα πολλὸν ἀμείνω*, "money is not for snatching, i. e. to be eagerly snatched." While therefore we think that we may always reproduce the abstract or active meaning of nouns in *-μος* and *-μη*, we admit that there are cases in which the latter especially are practically expressive of the thing done rather than the act of doing. Thus though *τι-μή* means really "an honouring" or "paying of honour," it is practically used

to denote "the price" paid, much like *τίμη-μα*, which is formally distinguished from it; and though *γράφ-μη* means "a writing or drawing," as distinguished from *γράφ-μα*, "a thing written or drawn," it is practically used to signify "a line" drawn (cf. the two meanings of *γραφή*). So also *δέσμη* means "a bundle" rather than the act of binding, and *δεσμός* means a thing for fastening, like *δέσμου-μα*. The termination *-μος* is generally preceded by *σ*, as in *θεσ-μός* from *τίθημι*, *δεσ-μός*, *δεσ-μή* from *δέω* (compare however *δη-μός*), or by its representative *θ*, as in *ἀροθ-μός*, *ἀροθ-μός*, *ῥυθ-μός* (compare however *ῥυ-μός*). A *κ* is occasionally aspirated, as in *πλοχμός* from *πλέω*, *λωχμός* from *λώω*, or even inserted instead of *σ* or *θ*, as in *ἀνχμός* from *ἀΰω*. The force of this ending is well shown by a comparison between the Latin *al-mus*, "the nourisher," and *alu-m-nus*, "the nourished."

254 (2) *Forms with the second pronominal element only.*

Nouns in *-σις*, *-τύς*, both feminine, express a relation to the subject, and therefore approximate in meaning to those in *-μός*: thus we may compare *πρακ-σις*, "a doing," *μίμη-σις*, "an imitating," *φά-σις*, "a showing," &c., with *ἐδη-τύς*, "an eating," *ἐπη-τύς*, "a showing compassion," *ὄρχησ-τύς*, "a dancing," *πρακ-τύς*, "a doing," &c. These two endings are related as *σύ* and *τύ*: between them stood the old form in *-τις*, as *φά-τις*, "a speaking," *μῆ-τις*, "a thinking," *πύσ-τις*, "an inquiring," &c. Compare the Latin *pes-tis*, "a destroying," *ves-tis*, "a covering," &c.; *po-tus*, "a drinking," *spiri-tus*, "a breathing." When we compare *por-tus* with *πορθ-μός*, *ὄρχη-σις* and *ὄρχησ-τύς* with *ὄρχησ-μός*, we see that, as the meanings of the first and second element often correspond in separate words (§§ 135, 150, 154), so there is scarcely any difference in signification between these endings. To this class belong the Latin supines in *-tum* and *-tu*, and the Greek verbals in *-τέος*, *-τός*. By the side of the words in *-τις*, expressing an action, we have a set of masculine nouns in *-της* denoting the corresponding agents: thus with *ἐπη-τύς*, *ὄρχησ-τύς*, we have *ἐπη-τής*, *ὄρχησ-τής*, &c. We shall show directly that these endings are connected in origin as well as signification with the verbals of which we are speaking.

The termination *-σος*=*σφος*, implying a collection, is a representative of the full form of the root *ῥα*. We have spoken above of its use in forming pronominal adjectives like *ῥ-σος*, *ῥ-σος*, &c. (§ 152). It also appears in substantives, as in *θία-σος*, "a collection of sacred persons," *θύο-σος*, "a collection of leaves," *πυρ-σός*, "a gathering of fire."

Among the modifications of the second pronominal element, the form *-νό-ς* is very common as an adjective ending. The vowel before the termination is most frequently *ι*, especially when the adjective is

derived from a verbal noun of agency in *-της*, as in *ποιητι-κός* from *ποιητής*, *θεατι-κός* from *θεατής*, &c.; and there is little doubt that this is an articulation indicating a pathology similar to that of the reduplications *τίθηναι*, *δίδωμι*, and that it most generally represents an *η*. If the word from which the adjective was derived ended in *-ιος* or *-ια*, the termination *-κος* is preceded by *-α*, as in *ἡλία-κος* from *ἥλιος*, *παροιμία-κός* from *παροιμία*. If the noun ends in *υ*, the termination is immediately appended to this semi-consonant, as in *ἄστυ-κός*, *θηλυ-κός*, *λιβυ-κός*. The isolated form *ἄλυ-κός* from *ἄλς* seems to have owed its *υ* to the influence of the *λ**. The terminations *-ᾱ-κ-ς*, *-ε-κ-ς*, *ᾱ-κ-ς*, *-ι-κ-ς*, *-υ-κ-ς*, and the Latin *-i-c-s*, are only modifications of this ending, as the adverb-ending *-κ-ς* is of *-κ-ς*, comp. *ἁλώπηξ* with the Sanscrit *lōpāka*, *κάλυξ* with the Sanscrit *kalāṣa* ("a water-jar"); and the forms *μουνάξ*, *εὐράξ*, *πολλάκ-ς*, *τετράκ-ς*, &c.† From these we must distinguish those words in which the guttural belongs to the root and the *-ς* constitutes the ending, as in *ἐπιμύξ* (root *μυγ-*), *ὀδάξ* (root *δακ-*). A few nouns have an euphonic nasal before the guttural; such are *λύγξ*, *σαλπίγξ*, *πλάστιγξ*. This termination *κό-ς* expresses a quality in answer to the question "what?"—as in *ποιητι-κός*, "like a poet," *ἀνδρι-κός*, "like a man," &c.: just so *bāla-ka*=*puer qualis?* in Sanscrit (Pott, *Etym. Forsch.* II. p. 458). Still more common is the termination in *-ιος* answering to the Sanscrit *yā-s*: in fact there is hardly a root or termination to which it may not be joined with a qualitative meaning. Under the form *-ίας*, *-ίου*, it is of extensive use in the construction of qualitative nouns, such as *νεανίας*, *κουρίας*, &c., and of proper names expressing a quality, as *Καλλίας*, *Λοξίας*, *Ἰππίας*, *Νικίας*, &c. We recognise this suffix also in the numerous class of abstract nouns ending in *-η*, and in those, denoting agents, in *-ης*: thus *ἀρχή*, *τριηράρχης*, stand for *ἀρχγιά*, *τριηράρχγας*, just as *τριηραρχέω* represents *τριηράρχγαμι*. It is not, however, subjoined to the ending *-κός*, to which it appears to be perfectly equivalent (compare *ἀνδρεῖος* with

* A young philologist, Dr. Jos. Budenz, has written an elaborate essay on this termination (*das Suffix κός, (ικός, ακός, υικός) im griechischen*. Göttingen, 1858). His object is to show that the termination is not *-κος* but *ι-ος*, a theory which is at once overthrown by the accentuation, for no merely vowel ending is oxytone. But although his analysis is altogether faulty, he has collected a number of stray particulars, and he has not failed to arrive at the conclusion, which we indicated 20 years ago, that *δ* is ultimately identical as an affix with *κ*, both being forms of the second pronominal element. We may claim the same priority in regard to his remark (pp. 53, 54) that "considered from the point of view occupied by comparative philology, the Greek language is better suited than any other of the cognate idioms to serve as the basis for many researches into the formation of words."

† The comparative philologist will be amused by Lobeck's difficulties; *Paralip.* p. 123.

ἀνδρικός), nor can we persuade ourselves that it is ever appended to the simple element of the second person, though some scholars have suggested that terminations like -σious in Greek and -sya in Sanscrit are compounds of *sa* and *ya*. We believe that the terminations -σις, -σία, are perfectly equivalent in form as they certainly are in meaning, and differ from the form in -ία only by being more complete (below, § 258). Our previous investigations have led us to the conclusion that there is an immediate connexion between the formative elements σι- and δ-, and we have seen this identity, and the connexion of both of them with F- in the analysis of the genitive (§ 247—249). As in the case of the relative pronoun, so also in these affixes it is clear that the mere guttural -κ may appear as the representative of the complex articulation (§ 146, cf. § 121); and there is a very remarkable identity in the use of the formatives κ- and δ-. Thus while the Greek feminines are regularly formed in τριδ- from τηρ, the Latin are as regularly formed in tric from tor; compare γενε-τριδ (-τρίς) with gene-tric (-trix). Similarly it cannot be doubted that τυραννι-κός is an extension of τυραννί-δ-(ς), that Ἰλια-κός, Κορινθια-κός, &c. are really derived from the collective nouns Ἰλιάδ-(ς), Κορινθιάδ-(ς), &c., and that the names of diseases, such as ἀρθριτιδ-(ς), νεφριτιδ-(ς), &c. are the basis of the corresponding adjectives ἀρθριτι-κός, νεφριτι-κός, &c. And as the nouns of agency in -της (-τηρ, -τωρ) have a corresponding form in τιδ-, we must recognise the same interchange of δ and κ in the almost invariable adjectives in -τικός. A third class of qualitative endings is connected with the modification -va. These appear in a very mutilated form, and therefore the real termination is not discernible at first sight, at least in the uncompounded state; with the addition of the third pronominal element this suffix becomes more obvious in Greek: without that addition it is not used in Sanscrit. In Greek we have γραφε-ύς=γραφι-κό-ς, ἰππε-ύς=ἰππι-κό-ς, &c. With reference to what has been said of the identity of the affixes δ- and κ-, it is worthy of observation, that while Δωριδ-(ς), Φωκίδ-(ς), stand by the side of Δωρε-ύς, Φωκε-ύς, we have secondary forms like Δωρια-κός, &c. The word βασι-λεύς does not belong to this class. It is compounded of λαός (λεFος, λέύς), and a root βᾶσι-, of which we can only say that it seems to be the same as that of βᾶρός, βᾶ, a vocative (see Valcken. *Adoniaz.* p. 383): compare Οἶλεus (=vis populi=Σθενέ-λαος), Ἀγῃσί-λαος, &c., and see Pott, *Etym. Forsch.* II. p. 278. The feminine corresponding to this masculine ending is -ώ; thus Πρωτε-ύς, Πρωτ-ώ; Νηλε-ύς, Νηλ-ώ; θεμιστε-ύς, θεμιστ-ώ, &c. The words εὐ-εστ-ώ, κακεστ-ώ, ἀει-εστ-ώ and ἔστ-ώ point to the connexion between this class and the nouns in -ως=Fός-ς, fem. -νῖα. For it is clear that we ought to derive εὐεστῶ not from εὐ ἔστί, which

is the derivation given by H. Stephens, after Hesychius, but from the participial εὖ ἔστως. Thus Thucydides, v. 46: σφίσι μὲν γὰρ εὖ ἔστῶ-των τῶν πραγμάτων ἄριστον εἶναι διασώσασθαι τὴν εὐπραγίαν. We shall point out the connexion between the masculine and feminine of this suffix when we come to the compound terminations. The nouns in -πός seem to contain the second pronominal element in its Attic form (ποῦ, πόθεν, &c.), as μαστρο-πός (see Eustath. 308, 2), χεδρο-πός, χαρο-πός, and perhaps ἀστέρο-πος (Schol. Eurip. 373), and κάρδο-πος. The solitary form ἐχθο-δο-πός contains this ending, subjoined to the element δο-; of which hereafter. It is possible that this ending may also lurk in the Homeric ἥπε-ρο-πε-ύς, ἥπε-ρο-πε-υ-τής, the root of which seems to be contained in ἀπα-τή. Döderlein (*Homer. Gloss.* p. 243, No. 376) connects ἥπεροπεύειν with ἀπροπής, comparing θεοπρόπος.

It might be supposed that the termination -της, gen. -του, which signifies a male agent, as κρι-τής, "a judge," &c., consists of the third element only. There is reason, however, to believe that this ending either presents the second element under the form τι, which is the case in all nouns like κρι-τής of the first declension, or contains a compensation for a consonantal crude-form in the nom. of the few nouns which end in -της, -τους, just as -ης appears for -εσ -εs in the nominative of compounds like εὐτείχης from τεῖχος. Words formed with the ending -της are sometimes passive; thus γενε-τής signifies both "father," which is the more common meaning, and "son" (Soph. *Œd. Tyr.* 470; Eurip. *Ion*, 919). We have also ἀτί-της, "dishonoured" (Æschyl. *Agam.* 72; *Eumen.* 246), ἀιγενέ-ται θεοί in Homer = αἰὲν ἔόντες, and Pindar calls Bacchus κισσοδέ-ταν θεόν (*fr.* 45, 9). But this meaning is more generally found with words in -τός, which termination appears not only in a large class of words with a passive signification, but also in the ordinals and superlatives. In the two latter cases it is probable that the termination is connected with -θεν the mark of the genitive case, and, therefore, with the second pronominal element, and the verbals in -τεος, -τους, -τις, &c.

255 (3) *Forms with the third pronominal element only.*

There is a large class of neuter substantives properly terminating in the element -τ-, which is however softened in various ways by the process of declension (see *Gr. Gr.* Art. 182). One of the most common of these alterations is the substitution of -ος for -ο-τ, and the omission of this sibilant in the oblique cases: thus προῶγο-ς for προῶγο-τ means a thing done, the genitive being προῶγεος for προῶγε-τος (according to § 114). The dental tenuis also appears alone in a number of participial adjectives, such as γραπ-τός, "written," χρισ-τός, "anointed," δει-νός, "dreaded," &c. Although the termination of the passive par-

ticiples in Latin and Sanscrit is identical with that of the supine, as it is called, in Latin, and the Sanscrit infinitive, and though it is clear that these supines and infinitives are of the same origin with the verbals in -τέος, &c. it is perhaps an open question whether we ought not to regard the termination of the passive participle as resulting from the third pronominal element only, and therefore as different from that of these verbals. One reason for inferring a difference between these endings and the verbals formed from the second stem is, that the former perfectly coincide in meaning with the words formed with the suffix -νος, which certainly has no connexion with the second element, and contains only the third in its strongest form. Thus both -τος and -νος are used to form passive participles; compare *plenus* and *re-ple-tus*, *bhâ-nu-s* and *bhâ-tu-s* (both signifying the sun in Sanscrit), the pronouns *ê-na* and *ê-ta* in the same language, and *σεν-νός*, *σεπ-τός*, in Greek. On the other hand, the termination -νός may be referred, like -τέος, -τός, to an active infinitive and there are analogies to explain the passive or objective meaning of adjectival words thus connected with transitive verb-forms (see below, § 415). The words *δει-νός*, *στυγ-νός*, *ποθει-νός*, *ἐλει-νός*, &c. are all expressive of objects conceived under certain relations; and the same may be said of the corresponding nouns in -νον, such as *ὄργα-νον*. In *σπλάγ-χρον* from *σπλήν*, we have probably the verbal root *χα-v-*. If so, the *σπλάγχνα* or *viscera majora* were regarded as an *extension* of the *σπλήν*. It will be remembered too that *n* and *t* are inserted in the present tenses of verbs in precisely the same manner, thus we have *τύ-π-τ-ειν* and *τέμ-ν-ειν* in Greek, *si-n-ere* and *flec-t-ere* in Latin (Pott, *Etym. Forsch.*, II. p. 467). The qualitative nouns in -τητ-ς (*τη-ς*), -τητος, Latin -tat-ς (*tâ-s*), -tatis, appear to be formed either from ablative cases of the third pronominal root, or by combination of the ending *τη*=*τγα* with that of the third element. This termination -νη is found with a similar meaning in *ἡδο-νή*, *ἀγχο-νή*: more clearly developed when compounded with the first and second elements as in *χαρ-μο-νή*, *δικαιο-σύ-νη*, and the adjectives *κριθά-μι-νος*, *πυρά-μι-νος*, *γηθό-συ-νος*, *κηδό-συ-νος*. The words *κρου-νός*, *κρή-νη* from *ἐκ-ρέω*, deserve particular notice on account of the aphæresis of the preposition. See above, § 176, and compare the Greek *ἔχ-θος*, *ἐχ-θ-ρός*, *ἔχθροι* (=ἔξω. Hesych.), &c.

256 (1a) *Terminations compounded of the first and other pronominal elements.*

Of these the most common are the compounds of the first and third pronouns. They express the action as proceeding from the subject, but with especial reference to its results, and generally appear

as extensions of the ending -μοσ (above, § 253). The simplest form of this extension is the noun of agency in -μήν (-μέν-ς) or -μών- (μόν-ς), as in ποι-μήν, "the feeder" (from πα-, *pa-scor*, πῶϋ, Sanscr. *paçu*, &c.), ἡγε-μών, "the leader" (ἡγε=διαγ-). There are also numerous adjectives with this formation, as αἰδη-μών, "bashful," μνή-μων, "mindful" (cf. μνή-μη), ἵππο-βά-μων, "going on horseback," &c. We have also participles in -μενος (Latin -*men*, -*mnus*, Sanscrit -*māna-s*), and nouns in -ματ=μεντ. Thus { $\begin{matrix} \text{πραγ} \{ \begin{smallmatrix} \text{μεν-} \\ \text{-μα-} \end{smallmatrix} \} \tau \\ \text{πε-πραγ-με-νον} \end{matrix} \}$ equally signify a thigh done, and differ from *πραῖνος* only in their reference to the subject as the doer in the former, and in the reduplication of the participial form. That this secondary form in ματ=μεντ- implies an anterior condition of the noun in μεν-* is shown by the derivative verbs, e.g. *κν-μαίνω*=*κν-μεν-ω* from *κῦ-μα*=*κν-μεν-τ* compared with *ποι-μαίνω*=*ποι-μεν-ω* from *ποι-μήν*=*ποι-μέν-ς*. This is farther shown by adjectives like *ἀκύμων*, *ἀπρόγμων*, *ἀναίμων*. The Latin and Sanscrit give the full affix, as in *ar-me-n-t-um*, *mo-me-n-t-um*, &c., in the former language, *cri-ma-n-tas*, &c. in the latter. The Greek compound suffix μεν or μου often assumes the form of -μω-ν, as in *λει-μώ-ν*, *γνώ-μων*, *πλεύ-μων*, &c., to which *ser-mōn*, *pul-mōn*, &c. correspond in Latin: it is sometimes extended into -μο-νή, as in *χαρ-μο-νή*, *πεισ-μο-νή*, *φλεγ-μο-νή*, *πλησ-μο-νή*, *πη-μο-νή* (comp. *πη-μα-τ*), and *ἄρ-μο-ν-ία* (*ἄρ-μο-νι-κό-ς*). Corresponding to these forms we have derivative verbs in -αω, as *δαιμον-άω* from *δαίμων* through *δαι-μονή*; we are disposed to refer the active infinitives in -μεναι to the noun of agency in -μονή, and we regard the passive participle in -μενος as a secondary derivative.

257 (2a) *Terminations compounded of the second and other pronominal elements.*

Under the form -ya or -va or -ha the second pronoun forms with the third the termination -ya-t, va-t, or va-n-t, in Sanscrit, *For* or *hot*- in Greek. Like the shorter form in -ύ-ς, this ending generally confers a qualitative meaning: thus *sinha-vat*, "lion-like," *bhaga-va-n-t*, "prosperous," *bha-va-n-t*, "a lord (from *bhā*, "splendour"), *φώς*, *φωτός*, for *φαFor-ς*, *πάτριως* for *πατρι-For-ς* (here the Sanscrit *pitr̥v̥yas* presents a longer form of the second pronoun), and the participles in -ως=*For-ς* (compare the neuter and oblique cases). The Greek compound terminations in -ως=*For-ς* have a feminine in -νῆα, in which the *v*, or labial part of the digamma, is still seen. The

* Bopp's idea (*Vergl. Gramm.* § 801) that -ματ=-μαν is quite erroneous. The form *carmentis* shows that *carmen* was originally *carment*.

shorter but analogous termination in -ύς has a feminine in -ώ. Here the case is reversed, the masculine having kept, while the feminine has lost, its characteristic breathing. We are disposed to infer from the feminine ending, -νῖα, and from the appearances to which we have before called the reader's attention, that the termination -ύς was originally written -νις or -Fις, and that the termination -ώ is a contraction of Fa. The change from *vis* to *us* is shown in the Oscan *ke-us* for *ci-vis*; see *Varronianus*, p. 125. We have endeavoured to show before that the vowels *i*, *u*, never appear but as the representatives of some lost or vocalized consonants, and we think that whenever they are found in a Greek termination, we may conclude that the element of the second pronoun is comprised in it. The Sanscrit feminine corresponding to the Greek in -νῖα, is -ushī. It is to be remarked that the feminine noun Ἡώς corresponds to the Sanscrit *ush-as*; and the analogy between Ἡώς, Ἑως, and the particle ἔως, originally ἄφος (*Varronian*. p. 288, above, § 248), may convince us that the former involved a digamma, which is farther confirmed by the form Ἀΰως. In the same way, αἰδώς must be regarded as derived from αἰδο-Fις. The masculine ἦρως, which we shall discuss more at length in a future chapter, includes φῶτ-ς mentioned above, for the original form was ἦρ-φαότ-ς. It is also curious that in the Slavonic languages *o-va* corresponds to the Greek ending in -ώ, as *Janova*=*Joannis uxor* (Pott, *Etymol. Forsch.* II. p. 486)

258 With the third pronominal root under the form -νῃ the second makes a class of abstract nouns in σύ-νῃ, as σωφρο-σύ-νῃ, δικαιο-σύ-νῃ, καλλο-σύ-νῃ, &c., which are nearly equivalent in meaning to those in -νῃ and -μο-νῃ. Indeed, καλλοσύνῃ, which means "that which is of the quality of beauty," differs very little from κάλλο-ς=κάλλο-τ, "objective beauty." We have no hesitation in classifying the termination -ι-νός with -σύ-νῃ, to which it bears the same relation that -ι-μός does to -σι-μός, -ιός to -σιός, -ια to -σις, and the genitive in -ιο to that in -σιο. The adjectives in -ι-νός express the material out of which any thing is made, or rather they imply a mixed relation, of quality and origin, to the object denoted by the substantive from which they are derived. Thus ξύλ-ι-νός means "of wood," "wooden," ὀστράκ-ι-νός, "of earthenware," *testaceus*, ὑάλ-ι-νός, "of glass," "glassy," κήρ-ι-νός, "of wax," "waxen," διφθέρ-ι-νός, "of tanned leather," "leathern," and similarly when there is only a metaphorical reference to the materials, as ἔσπερ-ι-νός, "late," *i. e.* belonging to the eventide, ποθε-ι-νός, "full of desire," ἔλε-ι-νός, "pitiable," &c., and ἀληθ-ι-νός signifies "genuine," *i. e.* "made up of that which is true." This last adjective is particularly applied to express that which is all that it

pretends to be, for instance, pure gold as opposed to adulterated metal. Compare the ἀληθινὸν στρατεύμα of Xenophon (*Anab.* i. 9, § 17) with the καθαρὸς στρατός or τὸ καθαρὸν τοῦ στρατοῦ of Herodotus (i. 211, iv. 135) and Thucydides (v. 8), where the reader will remember that the better class of citizens are contrasted to those of lower origin as good coin is to bad (see Aristoph. *Acharn.* 517; *Ran.* 719 foll.). This force of ἀληθινός seems to have escaped the notice of all the commentators on Theocritus (xiii. 14, 15*):

ὥς αὐτῷ κατὰ θυμὸν ὁ παῖς πεποναιμένος εἶη,
αὐτῷ δ' εἷ ἔλκων ἐς ἀλαθινὸν ἄνδρ' ἀποβαίη,

where ἔλκων does not refer to oxen drawing the plough, as the editors suppose, but bears its common sense of "weighing," "being heavy," "drawing down the scale." So that the passage means that Hercules brought up Hylas with a view to expel all dross and adulteration from him, in order that he might, by "weighing well," like pure gold, turn out a genuine man: just as Plato, speaking of the military caste in his state (*Resp.* iv. p. 428 E), says: πότερον οὖν ἐν τῇ πόλει οἶει ἡμῖν χαλκίας πλείους ἐνέσεσθαι ἢ τοὺς ἀληθινούς φύλακας τούτους; because, according to his fiction, the artisans were made of copper or steel, but the guardian soldiers of pure silver (iii. p. 415 A). In the same way Theocritus says (*Epigr.* xvii. 3): ὦ Βάκχε, χαλκρόν νυν ἀντ' ἀλαθινοῦ τιν ὧδ' ἀνέθικαν†. The adjectives in -ιμος or -σιμος express a quality by virtue of the first part of their termination, and also an action like the nouns in -μος. In fact, by this appendage, the relative word becomes *subjective*; thus ἄλω-σις signifies "a capture," and ἄλώ-σιμος παῖν, "a song of triumph from the captors."

259 It is difficult to believe that the large class of words in -ιτης, -ιᾶτης, -ᾷτης, -ητης, -ωτης, ought to be classed among those terminating with the affix -της only: for, if so, how are we to account for the penultimate syllable? It may seem strange that the Greeks should have written both πολίτης, or πολίτης, and δημότης, φυλέτης; but it cannot be denied that the former contains something in addition to the termination of the two latter. We must endeavour to ascertain

* Dr. Wordsworth, very ingeniously, proposes to alter εἷ ἔλκων into εἷς αἰκλων, but we still prefer the old reading with the interpretation given above, which is farther confirmed by the additional passage from Theocritus.

† Trench has given some additional illustrations of the ending -ινος (*Synonyms of the New Testament*, pp. 28 sqq.); but although his object is theological, he has not remarked that Θεὸν ἀληθινὸν ἐκ Θεοῦ ἀληθινοῦ in the Nicene Creed refers really to the statement that the Son is ὁμοούσιον τῷ Πατρί, "of one substance with the Father," which is just the point to be noticed.

what this addition is. The termination *-ίτης*, which is probably always an abbreviation of *-ιᾶτης* or *-ιήτης*, is appended to substantives of all declensions; thus, *χωρίτης* from *χώρα*, *δπλίτης* from *ὄπλον*, *πολίτης* from *πόλις*. With the exception of *ἡπειρώτης* from *ἡπειρος*, the termination *-ώτης* is appended to those nouns only which end in *-ια* and *-εια*. Now these nouns are combinations with the second pronominal element under the form *γα*: thus, *Ἰταλ-ό-ς*, *Ἰταλ-ία*, *Ἰταλ-ιώτης*. In this case, therefore, we conceive the termination is compounded of the second and third pronominal elements. May not the others be so likewise? In the Latin terminations *-ās* (for *āts*) genitive *-ātis*, the third pronominal element does not appear in so full a form as it does in Greek, but the length of the penultima points to a combination of the two elements as in the Greek. The whole question will be set in a clearer light, if we consider in general what is the origin of the ethnic names. Now, either the name of the country is derived from that of the people or *vice versâ*. When the former is the case, the name of the country generally ends in *-ία* or *-ική*, which are relative endings affixed to the gentile name: thus, *Ἰταλός* makes *Ἰταλία*, *Λάκων* makes *Λακωνική*. But there were two classes of inhabitants in countries of which the Greeks were wont to speak and write; the native inhabitants, and the Greek settlers. Thus, if *Ἰταλία* is the country of the *Ἰταλοί*, a person living and acting there would be *Ἰταλι(ᾱ)της*, which is therefore a secondary formation, or includes both pronominal endings. The Romans, in like manner, would call *Hispan-ia* the land of the *Hispan-i*, but a Roman living there would be called *Hispaniensis* (see Ruhnken *ad Sueton. Cæsar.* § 37). If all the Greek nouns of which we are speaking are secondary formations, we can now understand why we have *πολιήτης*, *πολίτης*, but *φυλήτης*, and *δημότης*. The two latter are derived from the substantives *φυλή*, *δῆμος*, which are themselves formed from the verbal roots *φν-*, *δφε*, by the suffixes *-λη*, *-μος*; the introduction of the syllable *γα*, *ια*, would therefore be quite superfluous. But *πόλ-ις* from the root *πολ-* (*πολύς*, &c.) is equivalent to *πολία*, just as the suffixes *-σις* and *-σια* are identical; the form *πολιήτης*, *πολίτης*, is therefore necessary for the second derivative. For *ἡπειρώτης*, *δπλίτης*, we must suppose intermediate forms *ἡπειρώιος*, *ὄπλιος*. The latter is presumed in the secondary derivative, and may be inferred from the words *ἐνόπλιος*, *πανοπλία*. We might therefore suppose the original existence of a word *δπλιήτης* or *δπλιώτης* corresponding in form and meaning to *ἀσπιδιώτης* (Hom. *Il.* xvi. 167, cf. Eurip. *Herc. F.* 159—161): for the *ὄπλον* or “thing moved about in defence” (*ἔπω*), and the *ρόπαλον* or “thing brought heavily down to strike” (*ρόεπω*), would constitute the two arms, protective and offensive, of the primitive warrior (see on *Antigone*, 115, 6).

There is the same parallelism between ὤκεα-νός, the *swift* river that bounded the earth, and οὐρα-νός, the *broad* expanse which rested upon it, according to the ancient idea. There is no occasion therefore for the derivation proposed by Bopp (*Gloss. Sanscr.* p. 334). In like manner for the patronymics -ίων, -ιώ-νῃ, -ί-νῃ, we must presume intermediate proper names in -ίας, -ία. It is important to remark that the nouns in -ῖās have occasionally by-forms in -ίτης; thus, we have both νεβρο-ίας and νεβρο-ίτης, the latter having a compound, the former only a simple ending. Pott's supposition (*Etymol. Forsch.* II. p. 559), that -ιά-της contains the Sanscrit root *i* or *gā*, "to go," is founded on what we consider a misconception respecting the nature of these formations.

260 The large class of nouns in -ών, -ώνος, must be referred to the same origin as the genitive plural, and therefore, as we have already seen (§ 250), are derived from a combination of the second element under the form σι- with the third element ν-. They denote a place of collection or aggregation: thus, ἀνδρ-ών is "a place for men," παρθεν-ών, "a maiden's chamber" (hence the temple of the virgin goddess Pallas), ἀγ-ών, "a general place of meeting," ἀμπελ-ών, "a place of vines," and even αἰ-ών, "a collection of periods." To all these the derivation from the same source as the genitive case is very appropriate, for the same idea is involved in each. This community of origin is farther shown by the form -εών, which is found in Ionic and old Attic (Lobeck, *Phrynichus*, p. 166). The further affix -ία is sometimes found, as in ῥοδ-ων-ία, μν-ων-ία.

261 (3 a) *Reduplications of the third pronominal element.*

Except in the nominative case of the few nouns which end in -της, -τους (above, § 288), and in words in -νῃ, -νιος, -νικος (§ 255), the third pronominal element can hardly be said to be in itself the vehicle of any ulterior formations, although, when appended to the other elements, it is often followed by additional syllables. The forms -τε-ρ, -τε-ρος, &c. must, like the third numeral, be considered as corruptions of a compound of the second element under the form τν or τι, and ρ-. But the third pronoun under the form να is very often followed by the other form τα, and in Latin and Sanscrit this combination is reversed. Thus we have *cras-ti-nus*, *pris-ti-nus*, in the former, and in Sanscrit we find both -tana and -tna, as in *hya-tanas*=*hesternus*, and *nū-tnas*=*novus*. In Latin and Sanscrit, but not in Greek, we have a combination of the third and first elements, as in *in-ti-mus*, "innermost," *punya-ta-mas*, "purest." The superlative-ending -τα-τος is a direct repetition of the third element.

262 (2*b*) *The second pronominal element under the form δα or θα.*

We have already mentioned that the element δ- or θ- is to be regarded as a corruption of the second pronoun. At first sight these articulations might seem to stand rather for the third than for the second element. But the question is easily determined by an examination of their employment as flexional endings. For while it is quite clear that δ- is equivalent to κ- and υ- as a derivative suffix (§ 254), there can be no doubt as to the identity of σι, F, δ- as the signs of the genitive or ablative (§§ 247—249). The simplest shape in which δ- or θ- appears is as the last letter of feminine crude-forms, as in *φυνγάδ-ς* (*φυνγά-ς*), *Ἑλλάδ-ς* (*Ἑλλάς*), *ληστρίδ-ς* (*ληστρίς*), *ὄρνιθ-ς* (*ὄρνις*), *κόρυθ-ς* (*κόρυς*), &c. According to Bopp (*Vergl. Gramm.* p. 139), the δ- is merely a secondary, unorganic addition, intended as a vehicle for the case-endings, and yet he says (p. 147), that *κόρυθ-ς* and *ὄρνιθ-ς* are compounds, the one denoting “what is placed on the head,” as from *τίθημι*, and the other “that which goes in the wood,” as from *θέω*, “to run.” We believe that in all cases δ- or θ- is as distinct and significant a pronominal suffix as any other: for instance, why is *λογάδ-ς* not a derivative, if *λεκ-τός* is? In the first and most general of patronymics, *παῖδ-ς*, this ending appears in the shortest form, and also in the patronymic *Θέο-γνιδ-ς* (comp. *Θου-κνυδῖ-δης*). The root of *παῖδ-ς* is that pronunciation of the first tenuis which in all the languages of the Indo-Germanic family is one of the first sounds uttered by an infant, to express at once one of the first persons whom he sees—his father,—and one of his first wants—food; a similar combination of the mother and the breast is found in the cognate sound *ma*, which is merely a modified utterance of *pa*; or perhaps *ma* is the first sound, and *pa* the second, uttered by an infant. Comp. *πάππας*, *pappa*, “papa,” “pap,” *papulla*, with *μάμμα*, *mamma*, “mama,” *μύξεν*, “mouth,” *μαζός*, &c.: see *Varronian.* p. 49. Combined with the termination expressing an agent, we have *πα-τήρ*, *μά-τηρ* in Greek, and similar words in all the cognate languages; from the former root with a more general ending we have *πα-οί* = *ἐπικητοὶ συγγενεῖς*, then *πῶ-λος*, &c. in Greek; *pue-r* (Lac. *πόιρ*), *pu-sus*, *pullus*, *pusillus*, *disci-pulus*, *disci-p-lina*, &c. in Latin; Sansc. *putra*, Pers. *pussr*, *pur* (whence *Shahpur* = *regis filius*, and so on. The same derivative sense may be recognised in the feminine nouns in δ- or θ-. “That which comes from or belongs to the wood” (Sanskrit *arani*, Lat. *ornus*) would be as good an explanation of *ὄρνιθ-ς* as any other, and the importation of a verbal root is quite gratuitous. The termination δ- appears in a longer form in the verbal substantives, like *βά-δος*, *χλί-δη*, &c., and in the common patronymics, as *Κρονί-δης*, *Θουκνυδῖ-δης* (the name *Θεοκνύ-*

δης occurs in Herod. viii. 65, &c.). To the same class with these patronymics we may fairly refer the derivative endings *-δεύς* and *δέος* = *δέφος* to indicate a young animal, or as secondary relative; thus we have *ἄλωπεν-δεύς*, "a young fox;" *ἄετι-δεύς*, "a young eagle;" *θυγατρι-δέος*, "a daughter's son;" *ἀδελφι-δέος*, "a sister's son." In the Æolic dialect this suffix appears as *-διος* (*Bekkeri Anecd.* p. 634: *ὁ τῶν Αἰλίων ἴδιος τύπος Ὑρόάδιος*. *Ὑρόαγὰρ παῖς ὁ Πιπτακός*), and the same affix appears in the diminutives *βοί-διον*, *γαστρί-διον*, *βοτρυ-διον*, &c. The second pronominal ending precedes the *-δης* in *Ἀριάδης* from *Ἄρις*, *Βακχιάδης* from *Βάκχης*, &c. Compare *πολ-ιή-της* with *δημό-της*. As some of the female patronymics are formed in the same way as the feminine nouns mentioned above—thus from *Βορέας* we have masc. patr. *Βορεά-δης*, femin. patr. *Βορεάς* (gen. *Βορεάδος*), Soph. *Antig.* 985, from *Τάνταλος* we have masc. patr. *Τανταλίδης*, femin. patr. *Τανταλῖς* = *Τανταλιδς* (gen. *Τανταλίδος*), &c.—we cannot consider the *δ* in the feminine nouns mentioned above as an unorganic fulcrum, and must regard it as the elemental letter of the termination *dā*, which we have recognised in the ablative or genitive case; and we have seen, that, in the fullest form of this case, *-σιον*, *-ιον*, it serves as the inflexion of the comparative degree. The relationship of these inflexions is absolutely proved by an examination of *Ἴων* = *Ἰάων* compared with the feminine form *Ἰάδ*-(ς), and the adjective *Ἰάσος* (*Ἰάσον* *Ἀργος*). For while the former preserves the digamma, the two latter stand related as *medius* to *μέσος*, originally *μέσσος*. Similarly we have *Ἰππασος* (*ἰππάδ*-), *Πήγασος* (*πηγάδ*-), &c. And *Ἰάσων* appears as a substitute for *Ἰάσσων* = *Ἰασίων* = *Ἰαδίων* (Budenz, *l.c.* p. 69). Hence it is interesting to remark, that we find *-ων* as well as *-δης* = *δγας* used for the expression of a patronymic. In the patronymics in *δ*- the feminine form is shorter than the masculine; in those in *-ων* = *-ιον*-ς the converse is observable, the feminine being *-ιώνη* and *-ῖνη*. The fair inference from this is, that the feminines in *-δ*-ς are anterior to the masculines in *-δης*, but the feminines in *-ωνη*, *-ινη* later than the corresponding masculine nouns. As it is pretty clear that the patronymics in *-δης* and *-ων* find their common origin in the sign of the genitive case, we may expect that, with a little vagueness occasionally, their significations will correspond. Indeed, the distinctions which we observe are casual or arbitrary, and the vagueness is shown by the accumulation of one ending after the other. The terminations *-ιονί-δης*, *ιά-δης*, *ων-ιάδης*, would sometimes express the son, sometimes the grandson; thus from *Ἄτρευς* we have *Ἀτρείων*, *Ἀτρείδης* (Agamemnon or Menelaus, the grandsons of Atreus); thus also we have the forms *Ἰαπετι-ων-ι-δης* from *Ἰάπετος*, *Ταλα-ων-ι-δης* from *Τάλαος*, *Ἀκρισιων-ιά-δης* from *Ἀκρισίος*, &c. In the names of tribes, supposed

to be the extant representatives of remote ancestors, we always have -δῆς or -δαί, never -ιονες; for example, the Athenian tribes are called Ἀργαδῆς, Βοντάδαι, Εὐπατριδαί, &c., and we have clans or castes called Ὀμηρίδαι, Ἀσκληπιάδαι, &c. The termination -δεύς, whence Ἀργαδῆς, expresses also general derivation without reference to any proper name, as in the words νίδεὺς, sing., λεοντιδῆς, χηνιδῆς, plur. There is a particular class of patronymics, principally found in the Bœotian dialect, in which the second element reappears in the guttural form; such are Ἀσώπιχος, Βοσπόριχος, Θείβιχος, Ἰδμήνιχος, Καβίριχος, Λέοντιχος, Φρόνιχος (Ahrens, *Dial. Æol.* p. 216); and these forms may no doubt bear the same relation to those in -δ that ὀρτάλιχος does to ὀρταλιδ-(ς), ἀρυστιχος to ἀρυστίδ-(ς) from ἀρυστήρ, and ψίξ (ψιχός) to ψίς (ψιδός). The Bœotian patronymics in -ώνδας seem to be derived from participial names, as Χαιρώνδας from χείροντ, Χαράνδας from χάροντ, Κρεώνδας from κρέοντ, Παγώνδας from πάγοντ, Ἐπαμεινώνδας or Ἐπαμινώνδας* from ἐπαμίνοντ. The participle ἀμίνων = ἀμύνων, involved in the last word, is particularly interesting from its outward identity with the comparative ἀμείνων. When we place the correlatives ἀμείνων and χείρων side by side, we are led to the conclusion, that, standing as they do for ἀ-μεν-ίων, χερ-ίων, they must be formed from some such words as ἀ-μεν-εύς, χερ-εύς. Now the former of these, on the analogy of ἄ-οξος, ἄ-οσσητήρ, would imply some one who stands or remains (Eurip. *Herc. F.* 163; Soph. *Antig.* 671) by us in battle: while χερ-εύς would denote a handicraftsman or labourer; and thus the usual opposition (Varronianus, p. 24) between the better and the worse, between the warrior and the workman, would be expressed in the terms of the language itself. The more common form of the word expressing assistance in battle is ἀμύνω, and we have the same form with the same meaning in the Latin *munia* = *mœnia*, and *murus* = *mœrus*. The explanation of this long *u* is not difficult. We have already seen that comparatives in -ίων presuppose a positive in -ύς or -ρός. We have no trace of the latter here, and must therefore assume the former. Accordingly, if the positive was ἀ-μεν-εύς, the verb would be ἀμεν-ύω, and this, on the analogy of ἐλαύνω, would pass into ἀμείνω = ἀμύνω, just as ἀμενίων would pass into ἀμείνων. The change of ἀμύνω into ἀμίνω would be natural enough in the Æolic dialect, which often substituted *ι* for *υ* (Ahrens, *Dial. Æol.* p. 81). Besides the participle in -ων, which forms the basis of the proper name Ἐπαμεινώνδας, we have also the form Ἀμειν-ίας corresponding to Καλλίας,

* That this is the genuine Bœotic spelling is clear from the inscriptions; see Böckh, *C. I.* i. p. 723. Thus we have Ἀμινίας, Nos. 1584, 1608. Ἀμινόκλεις, 1563 b. Ἐπαμινώνδας, 1574.

&c. Consequently, the form Ἐπαμεινώνδας may be considered as a variation of the double form Ἐπαμεινιάδας. Aristophanes plays on the interchange of Ἀμεινίας and Ἀμυνίας (*Schol. ad Nub.* 31); and a comparison of ταμ-ίας and ταμ-ών may show us the correspondence between the forms in -ίας and -ων. Besides, Ἀμύνων itself occurs as a proper name (*Aristoph. Eccles.* 365). The names Ὑπερίων and Ἐνδυμίων, which represent the rising and setting sun (see for the latter Max Müller, *Oxford Essays*, 1856, p. 49), have a quasi-participial value, though their terminations are merely relative or comparative. With this explanation, the comparative ἀμείνων will stand in good parallelism to its synonym ἄρτεων from Ἄρης or Ἀρεὺς, and both will signify pre-eminence in war. Similarly, κρείσσων, another synonym, refers to the possession of greater strength or power, and perhaps there may be some connexion between *bonus* (anciently *duōnus*), βέλτερος=βέντερος and δύναιμαι*. At least there seems to be little doubt that *duonus* must be akin to the Gaelic *duine*, "a man," in the emphatic sense, i.e. *vir*, ἀνὴρ, whence we have *duineadas*=*virilitas*, *virtus*. Cicero says (*de Finibus*, iv. 26, § 73), "*bonum*, ex quo appellatum sit, nescio." And if it really belonged to the Celtic ingredient in the Latin language his perplexity was very excusable. To return, however, to Ἐπαμεινώνδας, we may regard this word as a proof of the contacts between the participles in -ων and the comparatives in -ίων, and we may explain the addition of the patronymic ending -δας to these Theban names derived from participles by a reference to some other forms in which a verbal signification is distinctly included.

263 We have a long list of adverbs terminating in -δῆν, which, as Grimm rightly observes (*III.* p. 239), are to be classed with the Latin in -*im*, -*tim* (see *Varronianus*, p. 289), and the German in -*ingen*, -*lingen*; thus he compares βάδην, *gradatim*; βλήδην, *wurflingen*; σὺλ-

* There has been a great deal of vague writing on the subject of these comparatives. For instance, Bopp (*Vergl. Gramm.* p. 421) proposes to consider ἄ-μείνων as compounded of a *privativum*, and μείνων=*minor*, and he finds the same compound concealed in *omnis*! Döderlein (*Syn. u. Etym.* v. p. 349) derives ἀμείνων from μένος, μέμονα, in the sense of "willing," and finds the same idea in the connexion which he assumes between βέλτερος and *vel-le*. And the Professor of Comparative Grammar, to whose ludicrous performances we have occasionally adverted, has put together a tissue of absurdities in his attempt to trace the Greek, Latin, and English synonyms for *good*, *better*, *best*, and *well*, to a common origin. For instance, *optimus* is *o-pet-umus*=*o-bet-umus*=*bet-est*=*best*; the initial vowel being there merely to furnish the astonished reader with the necessary exclamation. Some cruel wag will suggest that the author of such derivations ought to be promoted at once to the professorship of *superlative philology*!

λήβδην, *conjunctim*; γράβδην, *vizilingen*; ἁρπάγδην, *raptim*; κρύβδην, *clam*; δρομάδην, *laufingen*; φυγάδην, *junctim*; &c. These adverbs sometimes appear under the shorter forms -δα, -δον, -δης, sometimes under the longer forms -νδα, -νδην, and -νθα, the last however in two instances only, μίνυνθα and ὀλίγυνθα. We occasionally find nearly all these terminations appended to the same root, as κρύβδα, κρυφιδόν, κρυφάδης, κρύβδην, κρυφανδόν. The explanation of these forms is much facilitated by their appearance in a special class of words, namely, the adverbs used as secondary predicates with παίξεν to describe some particular kind of game; such are βασιλίνδα, δραπετίνδα, ἔλκυστίνδα, ἐφετίνδα, κρυπτίνδα, κυβιστίνδα, ληκίνδα, μυνίνδα, ὀστρακίνδα, στρεπτίνδα, φαινίνδα, φρυγίνδα, χαλκίνδα. It is clear from the instances in which we perfectly understand the formation of the adverb, that these words are the cases signifying direction and tendency (like οἰκονδε) of verbal abstract nouns. Thus ἔλκυστίς must be assumed as meaning "a pulling," δραπετίς, "a running away," ὀστρακίς, "the use of a potsherd" (cf. οστρακίζω); so that παίξεν ἔλκυστίνδα must mean "to play in the way of, in the direction of, a pulling," and so of the others. The termination -δα is another form of δέν=θεν, which, as we have seen (§§ 245, 248), is ultimately equivalent to the merely locative ending τι(ν) or φι(ν); and the genitive and locative sign are really traceable to a common origin (§ 235). Consequently the difference between a form like κρυφανδόν and one like κρύβδα or κρυφιδόν, is really the same as that between the two adverbial case-forms οἰκονδε and οἰκοθεν, which have the same termination signifying motion from a place, but differ in the accusative -ν retained in the former word, so that in οἰκονδε the inflexion denoting removal is added to that indicating direction or motion onwards, and the whole form takes its signification from this element. A careful examination of all the adverbs now under consideration would convince us that the meaning which they convey, whether they are more immediately connected with nouns or with verbs, is simply that which would be produced by the suffix -θεν, or the patronymic suffix -δης, -δ-ς, that, namely, of proceeding from, being deduced from, caused by, in the manner of, &c. Thus, to take those formed from nouns, κλαγγη-δόν is equivalent to κλάγγη-θεν, καναχη-δά to κανάχη-θεν, &c. With regard to those formed from verbs, we must first consider what would be the meaning of a noun formed from a verb-root by the suffix -δης, -δ-ς. Thus, from the root βα-, "to go," we have βά-δος, "a going," also βά-δι-σις, &c., and ἐμβά(δ)ς, "a shoe:" from φνγ-, "to fly," we have φνγγή, "flight" or "fleeing," but φνγά(δ)ς, "a fugitive;" so that these words express that which comes out of the action of the verb, i. e. the manner of it. Just such a meaning we have in

the adverbs $\beta\acute{\alpha}\text{-}\delta\eta\nu$, $\xi\mu\text{-}\beta\alpha\text{-}\delta\acute{\omicron}\nu$, $\varphi\acute{\upsilon}\gamma\text{-}\delta\alpha$, where the forms $\text{-}\delta\omicron\nu$, $\text{-}\delta\alpha$, $\text{-}\delta\eta\nu$, differ only as $\tau\upsilon\pi\acute{\omicron}\mu\epsilon\theta\omicron\nu$, $\tau\upsilon\pi\acute{\omicron}\mu\epsilon\theta\alpha$, $\tau\acute{\upsilon}\pi\tau\epsilon\tau\omicron\nu$, $\tau\upsilon\pi\tau\acute{\epsilon}\tau\eta\nu$, in the verbs, which, as we shall hereafter show, were originally identical. The relation between these adverbs in $\text{-}\delta\alpha$, &c. and the corresponding forms in $\text{-}\nu\delta\alpha$, &c. is just that which subsists between the inflected verbal in $\delta\text{-}$ and the common participle in $\text{-}\nu\tau$, e. g. between $\varphi\upsilon\gamma\acute{\alpha}\varsigma=\varphi\upsilon\gamma\acute{\alpha}\delta\text{-}\varsigma$, and $\varphi\upsilon\gamma\acute{\omega}\nu=\varphi\upsilon\gamma\acute{\omicron}\nu\text{-}\varsigma$, or between the Latin synonyms *cupi-dus* and *cupi-en(t)s*. That the $\tau(t)$, which appears in the ordinary form of the Greek and Latin participle, represents a residuum of $F=dv$ or tv is proved by the ordinary Latin gerund in *nd-*, by the by-forms of the Latin participle, e. g. *oriundus=orien(t)s*, &c., by the verbals in $\text{-}\tau\acute{\omicron}\varsigma$, $\text{-}\tau\acute{\epsilon}\varsigma$, which must have been originally $\text{-}\tau\epsilon\text{F}\acute{\omicron}\varsigma$, and by the abstract verbals in $\text{-}\tau\acute{\upsilon}\varsigma$ corresponding on the one hand to the supines in $\text{-}\textit{tu-}$, and on the other to the verbals in $\text{-}\textit{σις}$, $\text{-}\textit{tio}$, &c. Accordingly the participial adverbs in $\text{-}\nu\delta\alpha$, $\text{-}\nu\delta\omicron\nu$, &c., are really inflexions of the corresponding participles, and the participle itself is thus proved to be a further inflexion from the simplest form of the verbal noun, just as the $\pi\alpha\upsilon\delta\iota\omega\nu$ $\delta\acute{\omicron}\nu\acute{\omicron}\mu\alpha\tau\alpha$ in $\text{-}\acute{\iota}\nu\delta\alpha$ (Julius Pollux, ix. 110) are formed from abstract nouns in $\text{-}\iota\varsigma$. The two in $\text{-}\nu\delta\alpha$ must be compared with $\acute{\epsilon}\nu\theta\alpha$, $\acute{\epsilon}\nu\theta\epsilon\nu$ (cf. *i-nde*), and the interesting word $\lambda\alpha\beta\acute{\upsilon}\rho\upsilon\nu\theta\omicron\varsigma$ shows that they belong to the same analogy as the adverbs in $\text{-}\nu\delta\alpha$. For $\lambda\alpha\beta\acute{\upsilon}\rho\upsilon\nu\theta\omicron\varsigma$ is evidently formed from $\lambda\alpha\beta\acute{\upsilon}\rho\upsilon\nu\theta\alpha$, i. e. $\lambda\alpha\nu\rho\acute{\iota}\nu\delta\alpha$ or $\lambda\alpha\text{F}\rho\acute{\iota}\nu\delta\alpha$, "shaft-wise," i. e. a place constructed of shafts, ducts, adits, or narrow passages, whence $\lambda\alpha\nu\rho\epsilon\acute{\iota}\omicron\nu$, "the place of shafts," as a name for the silver mines in Attica (see Welcker, *Tril.* p. 212; Kenrick, *Egypt*, p. 190). There can be little doubt that a similar explanation is applicable to the proper names $\textit{T}\acute{\iota}\rho\upsilon\nu(\theta)\varsigma$, $\textit{K}\acute{\omicron}\rho\acute{\omicron}\nu\theta\omicron\varsigma$, &c., though their origin is more obscure. The word $\acute{\epsilon}\lambda\mu\upsilon\nu\theta\text{-}\varsigma$, "a worm," which Bopp explains as "winding itself" (*Vergl. Gramm.* § 803), seems to include the simpler form exhibited in the Latin *vermis*, Germ. *wurm*.

264 It is well known that these adverbs are not formed from verbs which take a ξ in their derivatives, with the exception of $\beta\acute{\upsilon}\xi\eta\nu$, $\beta\upsilon\xi\acute{\omicron}\nu$, from $\beta\acute{\upsilon}\omega$ (Buttmann, *Ausföhr. Sprl.* § 119, 83). From verbs of this kind we have generally adverbs in $\text{-}\sigma\tau\iota$, as $\delta\acute{\omicron}\nu\omicron\mu\alpha\text{-}\sigma\tau\iota$ from $\delta\acute{\omicron}\nu\omicron\mu\acute{\alpha}\text{-}\xi\omega$. This form is most particularly common in connexion with verbs in $\text{-}\iota\text{-}\xi\omega$, as $\acute{\epsilon}\lambda\lambda\eta\nu\text{-}\acute{\iota}\text{-}\xi\omega$, $\acute{\epsilon}\lambda\lambda\eta\nu\text{-}\iota\text{-}\sigma\tau\iota$, $\acute{\alpha}\nu\delta\rho\alpha\pi\omicron\delta\text{-}\acute{\iota}\text{-}\xi\omega$, $\acute{\alpha}\nu\delta\rho\alpha\pi\omicron\delta\text{-}\iota\text{-}\sigma\tau\iota$, &c. In some of these adverbs κ is substituted for σ , on the same euphonical ground which has produced such forms as $\beta\alpha\sigma\tau\acute{\alpha}\text{-}\kappa\text{-}\tau\eta\varsigma$, from $\beta\alpha\sigma\tau\acute{\alpha}\text{-}\xi\omega$, though from $\kappa\tau\acute{\iota}\text{-}\xi\omega$ we have $\kappa\tau\acute{\iota}\text{-}\sigma\tau\eta\varsigma$, and $\acute{\epsilon}\delta\eta\text{-}\tau\acute{\upsilon}\varsigma$ by the side of $\acute{\epsilon}\delta\acute{\epsilon}\text{-}\sigma\tau\eta\varsigma$, and though we have $\delta\acute{\omicron}\rho\chi\eta\sigma\tau\acute{\upsilon}\varsigma$, $\delta\acute{\omicron}\rho\chi\acute{\eta}\sigma\tau\eta\varsigma$, $\sigma\omega\varphi\rho\omicron\nu\iota\sigma\tau\acute{\upsilon}\varsigma$, $\sigma\omega\varphi\rho\omicron\nu\acute{\iota}\text{-}\sigma\tau\eta\varsigma$, and conversely both $\acute{\epsilon}\pi\eta\tau\acute{\upsilon}\varsigma$ and $\acute{\epsilon}\pi\acute{\eta}\tau\eta\varsigma$ (see Lobeck, *Paralipom.* p. 19). According to this principle, we have $\acute{\alpha}\sigma\tau\alpha\text{-}\kappa\text{-}\tau\acute{\iota}$ from $\sigma\tau\acute{\alpha}\xi\omega$, and

ἀνομω-κ-τί from οἰμώ-ξω (Hermann, *ad Soph. Aj.* 1206). It will be remarked, however, that most of these verbs have γ or κ in the noun-derivatives, as στενά-ξω, στένα-γ-μα (not στένα-σ-μα), ἀστενα-κτί; κηρύσσω, κήρυξ, κήρυ-γ-μα, ἀκηρυ-κτί; οἰμώ-ξω, οἰμωγή, ἀνομω-κτί; στάξω, στάγμα, ἀστα-κτί; and the truer account undoubtedly is, that the ξ of the indicative is a representative of γγ or κγ. Many adverbs of this class have neither σ nor κ before the -τι, as ἀμελλητί, ἀμεταστρεπτί, ἀνιδροντί, &c., especially when the root terminates with ρ, as ἄρ-τι, ἐργηργρ-τί, ἐρερ-τί, &c. These terminations belong originally to the same class with those which we have just discussed; namely, to the verbals in -τις, -τους, -τεος. They are all locative cases, and bear the same relation to the Latin locatives in -tim, -ter, that the ordinary locatives in i do to the older locatives in -iv, -im. Those in -ωστί, as μεγαλωστί, δημιωστί, ἱερωστί, νεωστί, &c., are very singular forms; they comprise, in fact, an union of the old ablative in -ως with this locative suffix, an union similar to that which we have pointed out in οἶκον-δε, βασιλίν-δα, &c. Besides these locatives with the suffix -τι, -κ-τι, -σ-τι, from verbs, a great number of adverbs appear as the immediate locative cases of nouns, with the ending ει or ι; thus we have ἀμισθί, αὐτοβοεί, πανδημεί, ἀμαχεί, &c. It appears quite impossible to settle the orthography of these endings. Blomfield (*ad Æsch. Prom.* 216) would write -ί in all those to which there are corresponding nouns in -ος, on the analogy of οἴκοι, πεδοῖ, &c.; and -ει in the others. But the traditionary orthography on which the varieties depend is too consistent to admit of any such alteration; nothing is to be inferred from the analogy of οἴκοι, for οἴκει is recognised as a genuine form by Theognostus, and the Dorians wrote τουτεῖ, τηνεῖ, αὐτεῖ, ἐκεῖ, as general locatives, without any particular expression of gender (*Bekkeri Anecd.* p. 1404). The variation in the orthography and also in the quantity of these endings (*Bekkeri Anecd.* p. 571; *Gramm. ap. Hermann. de Emend. Rat. Gr. Gr.* p. 448) must be reckoned under those anomalies which are due only to caprice and accident, and which are so numerous as to defy all the Procrustean efforts of the Porsonian school. With these locatives in ει, ι, we must of course class those in αι, as χαμαί, πάλαι, παραί, &c. We have also older locative forms in -ν corresponding to these adverbs: comp. αἰέν, αἰεῖ; sometimes even αἰές, comp. -θεν, -θες, -tus, -dhas; πάλιν, πάλι, πάλαι; πρίν, πρό(δεῦρο, ἐτύπτετο), περί, ἔραν, ἔρα, παραί, προῶι, παρά, &c. The forms in -η belong also to this class, for in the Boeotian dialect μῆ, νή, ἐπειδή, &c. were written μεῖ, νεῖ, ἐπιδεῖ, &c. (Böckh, *Corp. Inscript.* i. p. 720). So that, on the whole, strange as it may appear, we are compelled to admit an original identity of terminations apparently so different as -ον, -ην, ο (compare the secondary person-endings of the passive voice

-μην, -σο, -το, &c.), -ι, -ι, -ιν, -ει, -αι, -η, -ες. To such a distance from an original form in the ending of a word will the arbitrary or accidental divergences of human utterance lead those who speak the same language! or shall we say that the principle of association, working and fermenting in the mind, has generated these by-forms in language to preserve in the outward symbols of thought the idea of likeness in dissimilarity?

265 To return, however, to the suffix *dā*. We have before shown on more than one occasion, that, in spite of the obvious suggestion of a simple change of the tenuis into the medial, this element is not a representative of the third pronominal stem *ta*, but a shortened form of that word which appears as the second personal pronoun and the second numeral*. The nature of the present researches and the wide field in which they are carried on, does not allow us to bring forward all our proofs at once; we are now, however, enabled to set forth with additional confirmation, some of the statements which we made in the preceding chapters. It appears from the investigation which we have just concluded, that there is an obvious connexion between the termination -της, expressing agency, the patronymic -δη-ς, where the *η* includes *y* as in the passive aorist ἐτύπην (comp. the Æolic patronymics in -διος, also δῆ-λος, for δέει-λος, δγαλος, "as clear as day"), the adverbial terminations in -δον, -δην, -δα, θα, -τι, -tim, -δισ, and the verbals -δος, -δς, -τύς, -τέος. The person-endings of the passive verb may convince us that the terminations -δα, -δε, must have emanated from -δαι through -δην, -δον; comp. ἐτυπτό-μην with τυπτο-μαι, τυπτέ-σθην with τυπτε-σθον, and τυπτό-μεθον with τυπτό-μεθα. We have before pointed out the identity of -θεν-, θες, with the ablative -d or -t, and the patronymic -δης. The adjectives in -διος, which generally express immediate proximity in space (Lobeck, *Phryn.* pp. 555 foll.), evidently belong to this class, as does also the Slavonic ending *dje*, *de*, or *dû* (Bopp, *Vergl. Gramm.* p. 394). There is only one common ground on which all these forms can meet, namely, the element used for the second personal pronoun, *tva*, *dva*, *dya*, or *tha*; and one or other of these natural varieties is represented by every one of the above suffixes, which in meaning and use seem to be equivalent. The Greek *θ* is a softened *δ* almost verging upon *y* or *j*. It is found where *y* appears in Sanscrit, and in some cases it appears to be equivalent to *ζ*, which is either *δσ-*, or *y* with a guttural or dental prefixed: compare Ζεύς, θεός, διός, αἰξήός,

* The relationship of *da* to the second as distinguished from the third element, of which the strongest form is *na*, is illustrated by the fact that in Armenian *sa*=*hie*, *da*=*iste*, and *na*=*ille*.

ἡτῷεος; χθι-ζός for χθι-διος; μέτα-ξε with θέν, &c. In the terminations -τύς, -τέος (for τεφος), the original *tva* is more clearly discerned, the *va* being vocalized in the former. In the endings -τι, -τιμ, the *i* is the only representative of the additional element by which in these cases the second pronoun is distinguished from the third. In general it may be laid down that the appearance of either *i* or *u* in a syllable is the representative of some lost element. These letters, as we have taken some pains to show, are the ultimate vocalization of certain consonants, and not simple articulation-vowels, like *a* and its lighter forms *e*, *o*. We have seen that *i* sometimes stands as the sole representative, not merely of *u*, but even of the digamma or a compound of the guttural and labial. It is this letter alone which is left to distinguish τις-, the corrupted Hellenic form of the interrogative and indefinite, from the common pronoun of the third person, and it is also this which alone remains in -τιμ, -τις, as *v* alone remains in -τυς, to indicate that they belong to the second pronoun. A similar remark may be made with regard to η. This *da* being the ultimate form of *tva*, we shall not be surprised to see it combined with the more original and simple form of the second pronominal stem, in -ιά-δης, -δο-πός (ἐχθο-δο-πός), &c. Its appearance in composition with the element -*na* is perfectly analogous to the compound terminations -μο-νη, -μω-ν, -συ-νη, -συ-νος. Thus we have ἀλγη-δών, ἄχθη-δών, κοτυλη-δών, &c., to many of which adjectives in -δα-νός correspond, as τηκε-δών, τηκε-δα-νός; but of course there are many adjectives in -δανός—οὔτι-δα-νός for instance—which have no corresponding substantive in -δών. A long series of Latin words in *do(n)*-, *dinis*, may be classed with the Greek nouns in -δών: the Latin termination seems to have the same force as the Greek; compare *grave-do(n)* with ἄχθη-δών, &c. In Greek, -δανός, -δών, appear to be sometimes equivalent to one another and to -της; thus we have μακε-δνός, μακε-δών, and μακέ-της, as synonyms.

266 (3 b) *The third pronominal element va under the form λα or ξα.*

There are two terminations of most extensive use, -λος, -ρος, which seem to agree in meaning. The former is found in a number of adjectives expressing objective relations, as τυφ-λός, δει-λός, στυφ-λός, μερά-λος, or substantives denoting things of a certain kind, as κρότα-λον, θυμέ-λη, νεφέ-λη: sometimes under a longer form, as σμερδα-λέος, λευγα-λέος, νηφά-λιος, δαιτα-λε-ύς; sometimes compounded with the element -μος, as in πενκά-λι-μος; sometimes with the element -κος, as in ἡ-λικ-ς (ἡλιξ), τή-λι-κος, &c. In Latin it presents itself in all these forms and some others; thus we have *tremu-lus*, *faci-lis*, *vincu-lum*, *scapu-la*, *fi-lius* (Φιός, φύ-ειν), *fe-li-c-s* (felix), *fame-li-cus*, &c. The

compound-endings *-λικος*, *-licus* have been preserved in the Gothic and German languages, and even in modern English. Thus we have *leiks*=Engl. "like," from a verb signifying "to see:" and *hwê-leiks* is "what like," German *we-l-cher*; compare *so-l-cher*, "so-like," "su-ch." The Gothic *ga-leiks*, German *gleich*, is analogous to the Sanscrit *sa-drīṣas*; compare *σά-φης* from *σύν* (*σα-μα*) and *φῶς* (above, § 181).

The termination *-ρος* seems to be equivalent in value to *-λος*. Compare *σκλη-ρός* with *στυφ-λός*, *λευγα-λέος* with *λυγ-ρός*, *μακ-ρός* with *μεγά-λος*, &c., *δῶ-ρον* with *κρότα-λον*, &c. The Latin words *clarus*, *gloria* (*κλε-*), *prima-rius*, *hila-ris*, exhibit correspondences to all the simple forms of *-λος*. In the compound-endings the coincidences are still more striking: compare *ficu-l-nus*, &c. with *hodie-r-nus*, &c., *doct-rī-na*, *text-rī-na*, &c. with *canti-lēna*, *stercu-li-num*, &c., *simulac-rum* with *peri-c-lum*, &c.; and in regard to the compound *-λικος* we may observe that the Greek and Sanscrit have with the same meaning *δέρκω* (*ἔ-δρακον*), *-d-r'ç*, where the *d* is one of those prefixes, probably pronominal, which so often appear before simple roots: compare *δάκρυ* with the Sanscrit *açru*, Lithuanian *aszara*.

In fact there can be no doubt that *-λος*, *-ρος* are etymologically identical, the latter being only a modernization of the former, as is so often the case; compare *glisco*, *cresco*; *celeber*, *creber*; *apostolus*, *apôtre*, &c. (see above, § 107). The very same word with modified meanings presents both endings. Thus we find *πά-λαι*, *πά-λιν*, and *πρίν*, from *παράι*: and similarly we have both *ποικί-λος* and *πικ-ρός*, from the same root *πικ-*, "to pierce." It will be remembered that *ποικίλος* and *στικτός* and even *ποικίλό-στικτος* are synonyms: the root *στιγ-* like *πικ-* means "to pierce" (Buttmann, *Lexil.* i. p. 18); and *ποικίλος*, as distinguished from *αἰόλος*, means "spotted," or marked with circles or points of a different colour (see e. g. Plato, *Resp.* p. 616 E, where it refers to the heaven, as spangled with "patins of bright gold"). *Πικρός* seems to have its proper meaning in Soph. *Ajax*, 1024.

267 The identity of the terminations *-λος*, *-ρος*, is still farther shown by the correspondence in meaning of the compound endings *-τ-λος*, *-τ-λη*, *-θ-λος*, *-θ-λη* with those in *-τ-ρος*, *-τ-ρα*, *-θ-ρος*, *-θ-ρα*; compare for example, *ἐχέ-τ-λη*, "the plough-tail," with *ἄρο-τ-ρον*, "the plough" itself; and see Pott, *Etym. Forsch.* ii. p. 555.

We have already made some remarks on the combination *t + r* when speaking of the numerals and comparatives (§ 157), and have indicated the probability that the element *τ-* is not the third pronoun, but the second, under the form *τυ-* or *τι-*. As a termination we have not only the forms *-τε-ρο-ς*, *τ-ρο-ς*, but also *-τερ-ς*, *-τηρ-ς*, *-τορ-ς*. In import these forms differ little from the simpler ending *-της*.

According to Buttmann (*Ausführl. Sprl.* § 119 B) the latter is more general, and is used as a kind of participle; thus, while οἰκήτορες means, "the inhabitants of a country," we have in Plato, *Phædo*, p. 111 C: καὶ δὴ καὶ θεῶν ἔδη τε καὶ ἱερὰ αὐτοῖς εἶναι ἐν οἷς τῷ ὄντι οἰκητὰς εἶναι θεούς, "in which the gods really dwell." In some cases the difference seems to have been merely that the Attics preferred the stronger form in -τήρ: thus they wrote γνωστήρ for γνωστής, δοτήρ for δότης, &c. (Pierson *ad Mærid.* v. γνωστήρας). Nouns in -τήρ may even be used with a passive signification, like some of those in -της: thus, we have ἐνδυντήρ πέπλος in Sophocles (*Trachin.* 671). The termination -τήρ does not differ at all in value from -τωρ. Words compounded with the latter are invariably paroxytones, with the former oxytones, a fact which we might thus express; the nouns expressing agency, which, either from being compounds, or from requiring emphasis on their root-syllable, draw back the accent, change the termination -τήρ into -τωρ. Thus, πατήρ makes ἀπάτωρ, because the accent is thrown back towards the negative α, and we find ῥήτωρ not ῥητήρ, because the emphasis lies upon the verb-syllable. Just in the same way we have ἄφρων and σώφρων from φρήν (seen § 116). Sometimes this compound termination appears under the forms -τρός, -τρα, and -τρον, as in ἱατρός, παλαίστρα, κέντρον, which must be supposed to be corrupted from -τηρ, as the more common -τα-ρα is from -τω-ρα found in *qua-tvor* (above, § 158). In Sanscrit we have both *trī* and *tār*, in Latin *tor*, *tārus*, the latter generally as a future participle; also in the feminine as a noun expressing the office or function of a person designated by the ending -tor; thus, *præ-tor*, *præ-tura*, &c. The forms -τρος, -τρα, sometimes appear as -θρον, -θρα, as in ὀλεθρος, οὐρή-θρα (not connected with θύρα, as Horne Tooke supposes, *Diversions of Purley*, II. p. 316), πλέ-θρον, &c. Giese suggests (*Æol. Dialect.* p. 108), that this aspiration of the τ is caused by the ρ. This, however, is not to be considered as inevitable, otherwise we should have no terminations in -τρος. A similar change has taken place in θρόον compared with τρεῖς, and in "three" compared with *drei*. The identity of the terminations -θρον and -τρον is manifest on a comparison of ἄν-τρον with βάρα-θρον. The former is not connected with ἄνεμος, ἄημι, as Pott supposes, but with ἀνά, and it signifies a passage above ground in a solid substance—e. g. a rock—as opposed to βάρα-θρον (=βάθα-θρον), which implies a passage in the ground below us. We may also compare ἄνθρωπος from ἀναδρώπτειν or ἀναδρᾶν=ἀνα-βλέπειν (see Lobeck, *Paral.* 118). The feminine of these terminations in Greek is -τειρα, -τρια, -τριδ, -τηρίδ, and -τραυνα, in Sanscrit *trī*, and in Latin *tric*. These forms have been explained in the last chapter. By the addition of the second pronominal element, we obtain the further

forms *τήριος* in Greek, and *-torius* in Latin, both for substantives and for adjectives; thus, *δραστήριος, ποτήριον, senatorius, victoria*. By a similar addition the Sanscrit verbal-ending *tav-ya* is formed from the second pronoun *tva*. The neuter forms in *-τήριον* denote the place where the work of the agent, who is designated by *-της, -τηρ*, is carried on. When we wish to speak of a similar place in reference to an agent defined by the ending *v-s=Fis*, it is only necessary to give the word an adjective form, and put it in the neuter gender. Thus, from *τροφε-ύ-s=τροφε-ΐς*, we have *τροφεῖον* (compare *-σις, -σιος, &c.*). The comparatives in *-ίων* from adjectives in *-ύς* are other instances of this formation. The Latin language has terminations *-ber, -bra, -brum; -cer, -cris, -crum*, corresponding to the Greek suffixes which we have been considering: *cre-ber, verte-bra, mem-brum; pul-cer, volu-cris, sepul-crum*. The latter seem to be another form of the ending *-culus*, composed of the second element and *-lus (λος)*. A comparison of *u-ber* with *οὔ-θαρ*, and *ru-brum* with *ῥου-θρόν*, makes it possible that some connexion may subsist between these endings similar to that which we find between *fera* and *θήρ*, so that the *b* will be a remnant of the labial involved in the second element *Fα*, just as the *c* in *cr, cl*, represents the guttural portion of that compound articulation. We refer to this class of nouns the names of months ending in *-ber* or *-bris*, such as *Septem-ber*. We cannot suppose with Bopp (*Vergl. Gram.* p. 436), that there is any necessity for having recourse to the Sanscrit substantive *vāra*, signifying "time." Bohlen (*Das alte Indien*, II. 445) considers the ending *-brum* connected with the Sanscrit *bhrī*, "to carry," so that *candela-brum* would signify "the light-bearer." If the importation of a verbal root were necessary, why should we not go at once to the Latin root *fer*? The large class of verbals in *-bŭ-lis*, to which nouns like *fa-bula* might be added, should induce us to explain the nouns in *-ber, -bra, -brum*, like those in *-cer, -cris, -crum*, namely, by a reference to the constant interchange of *l* and *r*. This is particularly exhibited in Latin in certain assimilations arising from abridgment. We have shown elsewhere (*Varronian.* p. 435), that *sacellum* was originally *sacra-culum*; it is well known that *puella* is a corruption of *puerula*; and no one will doubt that *castellum* is derived from *cas-trum*. The affinities of this last word are very interesting, and we will digress from our immediate object to trace a few of these ramifications. The root *cas-* conveys the cognate significations of "purity" and "protection," which are related as effect and cause. When religious reverence throws its shield over any person or locality, it becomes, according to the Greek notions, *ὅσιος*; but it is *βέβηλος* when that protection is withdrawn. The idea of order and arrangement is similarly opposed to that of confusion and

license. We can therefore understand why the same root *cas-* should enter into *cas-nus*=*cānus*, "white" (*Varronian*. pp. 53, 106), *cas-tus*, "religiously pure," *casa*, "a covered building," *cas-trum*, "a fortified enclosure," *καθα-ρός*, "undefiled," *κεσ-τός*, "the ornamented garment of Venus," *κάδ-μος*, "a suit of armour" (mythically the husband of *Ἄρμονία*), *κάσ-τωρ*, "the mailed warrior" (*ὁ χαλκομίτης* Pind.), *κόσ-μος*, "ornament and order," Sanscr. *śud*, "purificare" (Humboldt, *Kosmos*, Vol. I. note 27), &c. Combining all these and many other parallelisms which might be adduced, we shall see that the Latin *cas-trum*, like the Greek *τέμενος* and its cognate *temp-lum*, combined a signification of safety with that of sanctity, and held out a warning to all intruders. The plural, which is most generally used, merely indicates the collective nature of a camp, and is therefore quite analogous to *mænia*, &c.*

268 From all these comparisons, it must appear pretty obvious that *-λος* and *-ρος* are identical terminations; and when we consider the manner in which they are combined with pronominal elements, we cannot doubt that they must themselves belong to the formative element of inflected language. But it is not so easy to determine in which of the pronominal roots we are to seek the common origin of these particles. At one time we were disposed to connect them with the dental degenerations of the second element; and the principles of etymology are not opposed to this conclusion; nevertheless, after sifting all the evidence, and balancing one induction against the other, we have come, with full conviction, to the result, that the elements *λ-* and *ρ-* are by-forms of the third pronoun, and immediately derived from the other dental liquid *ν*. The following are the leading proofs.

* The Professor of Comparative Philology, to whom we have more than once alluded, in his anxiety to gain a character for originality, has ventured to propose that *castrum* means "an axe," and that it is derived from *cado*, which, borrowing a principle from this book, he connects with *cædo* (*Proceed. of the Phil. Soc.* II. pp. 249 sqq.). His grand reason for this conclusion is, "that the suffix *-trum* denotes always an instrument." Now to say nothing of *plaustrum* and *claustrum*, which he quotes, are *antrum*, *theatrum*, *monstrum*, *fenestra*, *veratrum*, and many like words, properly designated as instruments? It is palpably absurd to press the phrases *movere castra*, *ponere castra* with this view. No one ever felt any inconsistency, when it was still left for despairing ingenuity to convert a camp into a tool-chest. Besides, *castrum* occurs in the singular, and who would think of translating *castellum*, "a little chopper"? An absurd etymology provokes our mirth; but those who are anxious that scientific grammar should take root in this country will regret to find such crude puerilities recorded in the annals of a learned society.

Although *δει-λός* seems to stand in a certain opposition to *δει-νός*, these words are easily reconcileable according to the principle of contrast, which cannot depend upon the termination, for *ἐκπαλ-λος* = *ἐκπαλ-λος* corresponds in meaning to *δει-νός*; and they are brought together in the Latin *di-rus*, which answers to *δει-νός*, just as conversely *mag-nus* does to *μεγά-λο-*. Then, in the Greek language itself we may compare *ὄρρα-νον* with *κρότα-λον*, *σεῖσ-τρον*; *ὄρρ-νός* and *ὄρρα-νός* with *τυφ-λος*; *λυγ-ρός* with *στυγ-νός*; *ἐχθ-ρός* with [*ἐ*]*ξέ-νος*; *κα-λός* and *καθα-ρός* with *κα-νός*; *ὀλιτ-ρός* with *ἐλεει-νός*; and many others, which clearly show that the terminations *-λος*, *-ρος*, *-νος*, agree in expressing objective relations, or in denoting that an object presents itself to our observation a shewing a certain capability or use. To these special instances we must add the general fact that the use of *ρ-* as an affix indicating motion or conveying the idea of “beyond” (§ 130) is in strict accordance with the use of *-ν*, to mark the accusative, as the case of motion towards an object.

It will perhaps be regarded as an important confirmation of this view, that the only Latin and Greek pronouns which exhibit the liquid *l*, *λ*—namely, *ille* or *ollus* and *alius*, *ἄλλος*—are manifestly derived from *ἀνά* = *Ἔα-νά* (§ 116), so that *κεῖ-νος* and *ille* correspond not only in meaning (§ 135), but, ultimately, in form. We have a slighter evidence of the same kind in the use of the liquid *ḥ* by the Hebrews to express the most emphatic employment of the Indo-Germanic pronoun *n-* (above, § 184).

269 But we rest our demonstration of the identity of the pronominal elements *λ*, *ρ*, *ν* chiefly on the extensive and essential correspondences of their use as verbal roots. And, first, with regard to the identity of *λ-* and *ρ-* as they appear in verbs.

The intensive particle *ῥα*, which belongs to this family, seems to convey the idea of facility, easy motion, and so forth. We have accordingly recognised its connexion with *ῥέ-ειν*, *ῥά-διος*, &c. Now there are two Sanscrit verbal roots with the same meaning, *ri* and *srī*, both signifying “to go.” We do not conceive that the sibilant prefixed to the second interferes with its relationship to the first. The present of *srī* is *sarāmi* = *adeo aliquem*. This word is of course related to *deserere*, *salire*. We consider too that *conserere* and *consulere* are the same word. “Without doubt,” says Niebuhr (*Hist. of Rome*, i. p. 512), “the name *consules* means nothing more than simply *colleagues*: the syllable *sul* is found in *præsul* and *exsul*, where it signifies *one who is*: thus *consules* is tantamount to *consentes*, the name given to Jupiter’s council of gods.” This is not altogether

accurate*: the word *consentes* means "those who *are* together" (compare *ab-sentes*, *præ-sentes*): *consules*, "those who *go* together," *præsul*, "he who *goes* before," *exsul*, "he who *goes* out." That the Romans habitually spoke of "going," where we should rather indicate "being," is sufficiently proved by the words in *it-*, as *paries*, *aries*, *miles*, *pedes*, *eques*, &c. If *sa-li-re*, *se-re-re* are the same word, *li* and *re* must be the same root, and therefore *lev-is* and *rap-idus* are connected. The former contains the root $\lambda\epsilon F$, which we shall show in a future chapter in all its various uses. It signifies both "to see" and "to take;" we have the former meaning, e. g. in $\delta\text{-}\rho(\acute{\iota})\kappa\omega$; the latter in *rap-io*, *rap-idus*, and *lev-is*, *lev-are*. We may also compare Sanscrit *vṛikas* (Sabine *hirpus*=*virpus*, or *vipus* or *irpus*, Lithuan. *wilkas*, Latin *lupus*, Goth. *vulfs*) with the Greek $\lambda\acute{\upsilon}\text{-}\kappa\omicron\varsigma$, the connexion of which with $\lambda\epsilon\upsilon\text{-}\kappa\omicron\varsigma$ = $\lambda\epsilon F\kappa\omicron\varsigma$, $\lambda\acute{\upsilon}\kappa\eta$, *lux*, $\lambda\upsilon\kappa\acute{\alpha}\beta\alpha\varsigma$, and the root $\lambda\epsilon F$, "to see," is well known. Thus the old difficulty about Apollo's epithet $\lambda\acute{\upsilon}\kappa\epsilon\omicron\iota\omicron\varsigma$ vanishes at once.

270 With respect to the identity of ρ - and ν - in this reference, we will take the liberty of repeating here what we have incidentally stated on a former occasion, when we endeavoured to show that the ideas of progressive time and recurrence are connected with our conceptions of the regular flowing of water. As the cycles of hours and seasons are always recommencing, it is plain that our first notions of progression in time must be nearly allied to, if not identical with, those of recurrence; and there is no object presented to the senses which is more likely to suggest the idea of the course of time, than the noiseless, but unceasing flow of the running stream. Not to enter upon any metaphysical discussion of this point, etymology renders it sufficiently plain, that the words which imply "flowing," "progression," and "recurring," are connected with the same elemental root.

The particle, which, in the Latin language, expresses return, reversion, and recurrence, is that which forms the first syllable of these very words—namely, the prefix *re*. In the Greek language, the functions of this particle are performed by the preposition $\acute{\alpha}\text{-}\nu\acute{\alpha}$, while the particle and affix $\text{-}\rho\alpha$, $\text{-}\rho$ denotes, as we have seen above, motion in a direction previously indicated. Now the idea of motion in a direct line is the idea of perpetual recurrence, for the line is a series of points with evanescent intervals; and this again is the idea of progressive time. For our purpose, therefore, it only remains to

* Lobeck too has subsequently expressed his dissent from this remark of Niebuhr's (*Paralipom.* p. 128, note 16).

show that in their employment as verbal roots, λ-, ρ-, ν- are indifferently used to express these connected ideas.

It will not be denied that while νέομαι, νίσσομαι, νόστος, &c. express return and recurrence, and while νέος implies change, which is included in the idea of motion (above, § 55), the words νέω, ναῦς, νᾶμα, &c. convey the meaning of "being in the water, being borne along the stream," &c. Now a very similar conception is expressed by the cognate roots ξέω, ξεύμα, π-λέω, π-λύ-νω, λούω; rapio, p-luo, f-luo, lavo, &c.; compare Ἀχέ-λῳος with *aqua lavans, fluens*. We should naturally expect to find these roots in the Indo-Germanic term for "a year" — a period which includes all the changes of the seasons, which is always progressive, yet always recommencing; always changing, but always resuming its identity. Now in the ancient Etruscan, which we believe to have been pure Pelasgian in its calendar, we find the word *ri-l* signifying "a year." As the termination corresponds to the patronymic *l* in *servi-lius, fi-lius*, which in Greek is δι- or δ-, as in Ἀτρελ-δης, υἱ-διον, we may compare *ri-l* with δεῖ-θρον, which denotes the motion of water. Similarly, the Latin *annus*, more anciently *ânus*, must denote at once "the ever-flowing" (ἀέ-ναος), and "the ever-returning" (ἀεὶ νεόμενος). Accordingly, *ânus*=*jânus* stands on the same footing as *â-ril*, who seems to have been the God of the Tuscan year.

It will be admitted, we trust, that the result of this investigation is to identify the element λ==ρ- with the third pronominal root ν-. And if any one seeks to undervalue the importance of these inquiries, he may be told that these combinations have enabled us to supply the only link wanted to complete the chain of evidence, which proves the wonderful and systematic perfection of the formative contrivances of inflected language.

CHAPTER IV.

NOUNS USED AS PREPOSITIONS.

271 (1) *ἔνεκα*. Its true meaning suggested by its apparently pleonastic use. 272 Connexion of *ἔνεκα*=*ἐν**ἔκα* and *ἐκατι*. 273 Words containing *ἔκα*-; their cognate meanings. 274 Ideas of *separation* and *will* meet in that of *unity*. 275 Analysis of *ἐ-κα*. 276 Proper names which include these syllables. 277 Compounds of *ἔνεκα* and a pronoun. *Ἐνεκα* should be written for *οὐνεκα*, when the latter appears as a preposition. 278 (2) *ἁρῖν*. Distinctive use of *ἁρῖν* and *ἔνεκα*. 279 Meaning of *πρὸς ἁρῖν*. 280 Examination of the class of words to which *ἁρῖς* belongs. *ἁρῖς*, *χορῖς*, and *ῥῶρα*. 281 *ἑρῖς*, *χοιρῖς*, *χεῖρ*, &c. 282 *ἁρῶν*, *ἁρῶν*, and *ἁρῶν*. 283 *ἁρῶν* and *Γηρῶν*. 284 Military applications of the words *ἁρῖς*, *χορῖς*, &c. 285 The same idea conveyed by *ἁρῖς*, *ῥῶρα*, &c. 286 A similar reference discovered in the primitive meaning of *ἁρῖς*. 287 Associations by contrast in the acceptations of the root *χαρ-*. 288 More doubtful affinities of *ἁρῖς*. 289 (3) *δίῃ*. Its prepositional use. 290 Meaning of *δίῃ*. 291 Connected applications of *ἁρῖς* and *δίῃ*. "The Graces" and "fair dealing." 292 This is supported by the etymology of *δίῃ*.

271 **BY** the side of the regular prepositions, which, as we have seen, are reducible to the simplest pronominal elements, the fixed inflexions or adverbial forms of many nouns and pronouns are used syntactically as prepositions, that is, they are employed in connexion with some case, usually the genitive, or, in common language, they govern that case. Thus we have *ἀρχι* and *ἐγγύς*, *ἐγγύθι*, "near," one evidently the dative of *ἀρχι*, the shortened form of *ἀγκάλη*, the other exhibiting *ἐν* prefixed to the dative of a word synonymous with *γύη*. The idea of separation is expressed by *ἄτερ*=*ἄντερ*, by *χωρίς*, the fragmentary dative of *ῥῶρα*, and by *τῆλε*, *τηλοῦ*, *τηλόθι*, and *τηλόθεν*, different cases of a word denoting growth and extension (below, § 344). Among the cases of nouns, which contribute in this way to the definite syntax of the Greek language, there are three words which deserve special notice for etymological considerations. These words are (1) *ἔνεκα* or *ἐκατι*, (2) *ἁρῖν*, and (3) *δίῃ*. As these quasi-prepositions have a sort of connexion with one another, and as the first two belong, each of them, to an extensive family of words which has not been sufficiently explained, we shall devote a separate chapter to their consideration.

(1) It is generally laid down that *ἔνεκα* signifies "on account of," "for the sake of;" but it is proper to state that the genitive case,

with which *ἐνεκα* is generally found, may stand alone with the same signification, as when Thucydides says (i. 4) that Minos cleared the Ægean sea of pirates as far as he could, *τοῦ τὰς προσόδους μᾶλλον ἵεναι αὐτῷ*, and also that the genitive case may be accompanied by some additional preposition conveying a similar meaning, or by *χάριν* : as will appear from the following passages; Sophocles, *Philoctet.* 554;

ἂ τοῖσιν Ἀργείοισιν ἀμφὶ σοῦ νεκα
βουλεύματ' ἐστὶ.

Thucydides, viii. 92 : καὶ ὁ μὲν Θηραμένης ἐλθὼν ἐς τὸν Πειραιᾶ... ὅσον καὶ ἀπὸ βοῆς ἐνεκα ὠργίζετο τοῖς ὀπλίταις· ὁ δὲ Ἀρίσταρχος καὶ οἱ ἐναντιοὶ τῷ πλήθει (read τῷ ἀλήθει) ἐχαλέπαινον. Xenophon, *Hellenic.* ii. 4, § 31 : πέμπων δὲ πρέσβεις ὁ Πανσανίας πρὸς τοὺς ἐν Πειραιεὶ ἐκέλευεν ἀπιέναι ἐπὶ τὰ ἐαντῶν· ἐπεὶ δ' οὐκ ἐπειθοντο, προσέβαλλεν ὅσον ἀπὸ βοῆς ἐνεκεν, ὅπως μὴ δῆλος εἴη εὐμενὴς αὐτοῖς ὢν. Lysias *de Evandri probatione*, p. 176 : ὁ θείς τὸν περὶ τῶν δοκιμασιῶν νόμον [οὐχ ἥμιστα] περὶ τῶν ἐν ὀλιγαρχίᾳ ἀρξάντων ἐνεκεν ἔθηκεν. Plato, *Politicus*, p. 302 B : οὐ μὲν ἀλλ' εἰς γε τὸ ὄλον ἴσως ἅπανθ' ἐνεκα τοῦ τοιούτου πάντες δρωμεν χάριν. Legg. iii. p. 701 D : ἀλλ' ἐπανερωτᾶν τὸ νῦν δὴ λεχθέν, τὸ τίνας δὴ χάριν ἐνεκα ταῦτα ἐλέχθη. In Aristophanes, *Thesmoph.* 372,

ἢ Μήδους ἐπάγουσι τῆς
χώρας οὐνεκ' [ἐνεκ'] ἐπὶ βλάβῃ,

it is probable that the last three words are a mere repetition of those in v. 367 : κερδῶν οὐνεκ' [ἐνεκ'] ἐπὶ βλάβῃ. We think, however, that it is unnecessary to place them between brackets, as Dindorf has done. In the other passages it is easy to show that *ἐνεκα* is neither superfluous nor insignificant. The phrase ὅσον ἀπὸ βοῆς ἐνεκα, used by Thucydides and Xenophon, is probably a military expression: for a Greek battle generally began with a shout, and if the parties did not go farther than that, it was of course only a sham-fight. And thus Xenophon says that Pausanias attacked the Peiræus *merely* so far as shouting went; he made a false attack: and Thucydides states that whereas Aristarchus and the young oligarchs who accompanied him were *sincerely* indignant (we read either τῷ ἀλήθει or τῷ πλήθει τῷ ἀλήθει, the latter having been merged in the former from its similarity of appearance), Theramenes *only* affected to condemn the conduct of the soldiers,—ὅσον ἀπὸ βοῆς ἐνεκα ὠργίζετο, he showed his anger *only* so far as making an outcry went. In these two passages, then, *ἐνεκα* clearly means “only.” In all the other instances of alleged pleonasm the signification obviously is “especially,” “in particular.” Indeed, it is probable that, in the passage of Lysias, we ought to bracket, not *περὶ*, as Bekker has done, but *οὐχ ἥμιστα*, which seems to be a gloss upon *ἐνεκεν*. The etymological analysis, which we

shall now attempt, will show us that both these adverbial meanings, "only" and "especially," are included among the primitive significations of *ἐνεκα*.

272 The relationship between *ἐνεκα* and *ἐκατι* or *ἐκητι*, as it is written in the Ionic dialect, is the same as that which subsists between the Italian synonyms *in fuori* and *fuori*, which are used indifferently as prepositions signifying "without." *Ἐκατι*, the older word, has the complete case-ending, and is used without the preposition *ἐν*, which supplied the place of the locative in the more recent language; *ἐνεκα* contains the preposition *ἐν* prefixed to a mutilated locative of *ἐκας*. The formation of *ἐνεκα*=*ἐν ἐκα* is perfectly analogous to that of *ἐναντα*=*ἐν ἄντα* and *ἐμπα*=*ἐν πᾶσιν*. In *ἐνεκα* the aspirate of the noun has been transferred to the beginning of the word, according to a principle mentioned before, of which the Greek language furnishes many examples: thus *ὁ πρὸ ὁδοῦ* makes *φροῦδος*, and *ὁ πρὸ ὁρῶν*, *φρουρός*. Indeed, it would be absolutely necessary that when *ἐν ἐκα* became a single word, the aspirate should be so transposed, for the analogies of Hellenism do not permit an aspirated vowel anywhere but in the first syllable, and it is remarked as a strange peculiarity of the Athenians that they said *ταῶς* instead of *ταῷς*—*φίλαρχος γὰρ οὔσα καὶ ἡγεμονικὴ τὴν φύσιν ἢ δασύτης τοῖς τελευταίοις μέρεσι τῶν ὀνομάτων οὐδαμῶς ἐγκαθειργννται* (Athenæus, p. 397 f). We find a similar transfer even in the case of aspirated consonants: as in *τρέφω*, *θρέψω*; *ἔχω*, *ἔξω*, &c. From these instances, and from mere crases like *δομάτιον* for *τὸ ἱμάτιον*, we must distinguish (a) those in which it appears uncertain whether there is a transfer of the aspirate or not, as in *τέθριππον* from *τετρα-* and *ἵππος*, (b) those in which the aspiration seems to result merely from a contact with the *ρ*, as in *θράσσω* for *ταράσσω*, and (c) those words (like *θόρυβος* compared with *τύρβη*, *θρέομαι* with *τρέω*, and *θρύπτω* and *θραύω* with *τρυφή* and *τρύω*) in which the aspirate seems to result merely from a kind of vacillation and uncertainty of use (see above §§. 100, 164). *Ἐκα* as a mutilated though old form of the dative or locative may be compared with *λίπᾱ* in the phrase *χοίεν λίπ' ἐλαίῳ*, where *ἐλαιος* is a regular adjective from *ἐλάα*, and *λίπᾱ ἐλαιον* signifies "olive-oil" (Buttmann, *Ausf. Sprl.* Vol. I. p. 229); *κέρα* for *κέρατι* gives us the intermediate stage. But we have the proper ending of the locative in the form *ἐνεκεν*, from which *ἐνεκα* is derived (above, § 114), and which is often used even in the more recent Attic writers: compare *κα, κεν*; *ἐνθα, ἐνθεν*; *ἐπειτα, ἐπειτεν*; *πρόσθα, πρόσθεν*, &c.

273 The element *ἐκα*, which is the essential part of the synonyms *ἐκατι* and *ἐνεκα*, occurs also in the following words: *ἐκάβη, ἐκάς*,

ἔκαθεν, ἐκάλῃ, ἐκαμήδη, ἕκαστος, ἐκάτερος, ἐκάτη, ἕκατος, ἕκηνλος, and ἐκῶν, besides a great number of derivatives, as ἐκά-εργος, ἐκατη-βόλος, ἐκη-βόλος, &c. To classify these words we will first set apart the proper names Ἐκάβη, Ἐκάλῃ, and Ἐκαμήδη. The remaining words are a substantive ἕκας, genit. ἔκαθεν, dat. ἕκα or ἕκεν found in ἔνεκ(^α_{εν}), with which are connected the two adjectives ἕκα-τος (fem. ἐκάτη), and ἐκῶν (ἐκό-ντ-ς); the comparative and superlative ἐκά-τερος, ἕκασ-τος; and the dative ἕκητι of a substantive ἕκης (ἕκ-γα-τ-ς) no longer in existence, by the side of which we have the adjective ἕκηνλος. Such is obviously the proper grammatical classification of this set of words, so far as regards the forms. We must now investigate their significations. Ἐκός, which is used as an adverb, denotes distance, whether in space or time; as ἄστυ οὐχ ἐκός πον (Sophocl. *Philoct.* 41), "he is not far off;" οὐκ ἐκὸς χρόνου πάρεσται (Herod. viii. 154), "he will be here at no distant period." The word belongs to the oldest state of the language. A grammarian under the head ποῖαι γλῶσσαι κατὰ πόλεις remarks, Θεσσαλῶν—ἐκός. πόρρω (*Bekkeri Anecd.* p. 1095, note), which is much the same as calling it a Pelasgian word (Niebuhr, *Hist. of Rome*, i. p. 30, note 69). Ἐκαθεν generally means "from or of that which is distant:" it may be used as a synonym for ἕκας (Homer, *Odys.* xvii. 25: ἔκαθεν δέ τε ἄστυ φάτ' εἶναι), as the genitive of other words is also used to denote locality. The idea of distance is also conveyed by Ἐκατος, Ἐκάτη, which are epithets of the Sun and Moon, the two distant powers (*Theatre of the Greeks*, 6th edition, p. [23]), and by the epithets ἐκά-εργος, ἐκατη-βόλος especially applied to them. That the numeral ἐκατόν has no real connexion with these words may be seen by the accentuation; and it has been shown before that it belongs to entirely a different class (§ 162). The idea of distance is exchanged for that of separation in the words ἐκά-τερος, "either one of two;" ἕκασ-τος, "each one by himself out of many;" the latter is analogous to ὀλιγοσ-τός, πολλοσ-τός, of which we have spoken before. A comparison of ἐκά-τερος with ἀμφο-τερος shows how completely the former represents the sense of unity conveyed by the Sanscrit *ê-kas*. Plato defines the two comparatives by saying (*Theætet.* 185 B): ὅτι ἀμφοτέρω δύο, ἐκάτερον δὲ ἓν. The grammarians understood the distinction. Thus Maximus Planudes says (*apud Bachmann. Anecd.* ii. p. 88, l. 25): ἐκάτεροι καὶ ἀμφοτέρω ἐπὶ δύο, ἕκαστοι καὶ πάντες ἐπὶ πολλῶν. διαφορὰ δὲ ὅτι τὸ μὲν ἐκάτεροι καὶ ἕκαστοι ἐπὶ τῶν διηρημένως ἐνεργούντων τι νοεῖται, τὸ δὲ ἀμφοτέρω καὶ πάντες ἐπὶ τῶν συνημμένως. And this distinction is illustrated by another grammarian (*Bachmann. Anecd.* ii. p. 376, l. 10): ἀμφοτέρω δοκὸν φέρουσιν, ἕκαστον ἓνα δοκόν· ἐκάτεροι δοκὸν φέρουσιν, ἕκαστον δύο δοκοῦς, χωρὶς ἕκαστος. This idea of separation and unity is clearly exhibited in the phrase

ὥς ἕκαστοι, "severally," as in Thucyd. i. 3: οἱ ὥς ἕκαστοι Ἕλληνες, "the Hellenes, taken severally or as separate tribes," where it is opposed to ξύμπαντες. So also in Thucyd. i. 36, we have τοῖς τε ξύμπασιν καὶ καθ' ἕκαστον, and in Aristotle, *Politics*, iii. 15, § 16, we read ἐκάστου καὶ ἐνὸς καὶ συμπλειόνων κρείττω. We have a still further modification in ἐκὼν, ἔκμηλος, which imply, acting by oneself, without interference on the part of any other person, acting according to one's own will and pleasure, doing anything of one's own accord, without consulting or being influenced by any other person. Of the two adjectives ἐκὼν refers rather to the free-will of the agent, ἔκμηλος to his freedom from disturbance, and his consequent pleasure and quiet. Yet both of them equally convey the idea that the person described is some one by himself, that is, considered without reference to any one else. Hence ἐκὼν is particularly opposed to βία, as in Sophocles, *Œd. Col.* 939: βία τε κοῦχ ἐκὼν, and it is used in speaking of errors which men have committed with a full knowledge of the consequences, as when Prometheus says (*Æschyl. Prom.* 265):

ἐγὼ δὲ ταῦθ' ἅπαντ' ἠπιστάμην·
ἐκὼν, ἐκὼν ἡμαρτον οὐκ ἀρνήσομαι.

In the phrase ἐκὼν εἶναι, this adjective points still more directly to the independent agency, as in Herodotus, vii. 164: ἐκὼν τε εἶναι καὶ δεινοῦ ἐπιόντος οὐδενός; so that the phrase is nearly equivalent to the Atticism τὸ ἐπὶ σφᾶς εἶναι (Thucyd. iv. 28). Ἐκμηλος generally implies uninterrupted rest and quietness, the results of non-interference from without. We have already explained the principle according to which εὐκμηλος is only a by-form of ἔκμηλος (above, § 116): it is expressly stated by Apollonius (*Bekkeri Anecd.* p. 558) that εὐκμηλος is related to ἔκμηλος in the same way as εὔτε to ὅτε. Homer invariably uses ἔκμητι in connexion with the name of some divinity, to express that the action in question has been effected by the aid or special favour of the protecting power. Thus *Odyss.* xx. 42, Ulysses, addressing Minerva, asks:

εἵπερ γὰρ κτείναίμι, Διὸς τε σέθεν τε ἔκμητι,
πῇ κεν ὑπεκπροφύγοιμι;

It is used in this sense by Pindar, e.g. *Pyth.* v. 9: ἔκατι χρυσασμάτων Κάστορος, or as expressing human agency, as in the old proverb: ἔκμητι Συλοσῶντος εὐρυχωρίη, "room enough, thanks to Syloson" (Strabo, p. 638); and finally, which is much the more common usage, as a synonym for ἔνεκα, whether as signifying "by means of," "on account of," "for the sake of" (*propter*), as in Pindar, *Pyth.* x. 58: ἔκατι στεφάνων θαυτὸν ἐν ἄλιξι θαλάσσειον ἐν καὶ παλαιτέροις, or with the meaning "as far as," "in regard to" (*quoad*), as in *Æschylus, Pers.*

343: πλήθους μὲν ἂν σάφ' ἴσθ' ἕκατι βαρβάρους ναυσὶν κρατῆσαι
—“if it had depended *only* on the number of their ships, the Persians
would no doubt have gained the victory.”

274 We have now considered all the simple words into which ἕκα-enters, and it appears that there are only three meanings, *distance* or *separation*, *will*, and *unity*. It is, we conceive, easy to show that these are only modifications of one and the same idea. And first, the ideas of separation, distance, and unity are identical. That which is absolutely distant or separated is said to be *alone*, i. e. all one: and thus the first numeral is expressed either by the pronominal element *ma*, denoting the subject as opposed to the object, or by some pronoun *ê-na* (*unus*), or *ê-ka*, which combines the idea of definite locality with that of distance. Again, the idea of will is immediately derived from that of self. A man's personality, individuality, or character, depends upon his will, as Schiller says (*Wallensteins Tod*, iv. 8): “den Menschen macht sein *Wille* gross und klein,” or rather the will and the character are the same, for, as Novalis remarks: “a character is a completely fashioned will” (ein Character ist ein vollkommen gebildeter *Wille*, ii. p. 284). Now the very idea of a distinct person or individual is that he cannot be divided, that he is an unit; hence Paschasius rightly asserts—in *Deo et homine, gemina quidem substantia, sed non gemina persona est, quia persona personam consumere potest, substantia vero substantiam consumere non potest* (quoted by Hooker, Vol. ii. p. 288 Keble). So that the meanings “separation” or “distance,” conveyed by ἕκας, ἕκατος, and “will,” borne by ἕκων and ἕκηνλος, as well as the sense “only” or “especially,” which we have extracted from ἔνεκα in the cases of alleged pleonasm quoted above, are all derivable from that of “unity,” which is the meaning of ἐκάτερος and ἐκαστος. Ἐνεκα and ἕκατι, in the ordinary use, bear all these modified but nearly connected significations.

275 Comparative grammar shows us that the element ἕκα- is, in fact, identical with that compound of two pronominal stems which forms the first Sanscrit numeral *ê-ka-s*, and the Latin adjective *æ-quu-s*, denoting unity or sameness. The identity of *ê* and *ê* is established by a comparison of *dêvas* with θεός, &c., and by the frequent metathesis of the breathings and semivowels (above, § 116). It happens in some cases that a class of words containing a common element preserve their external resemblance more completely in Greek than in Sanscrit, although the changes which the root has undergone may be greater in the former than in the latter language. This is one of those cases: for, although the element ἕκα- originally began with an

aspirated labial, as appears from the fact that all words containing this root are digammated, and from the by-form *εὐκηλος*, they have in every other instance been consistent in the change to the aspirate, or in the suppression of the labial element; whereas the Sanscrit has merely transposed the guttural semivowel in the numeral *ê-kas* = *ai-kas*, and has retained the labial alone in *vaç-mi*, "I will," *vaças*, "will or power," *a-vaças*, "unwilling," *a-vaçyam*, "by compulsion." The ablative *vaçât* of *vaças* is used to signify "on account of," just like *ἐκати*. After what has been said about the semivowels in a former chapter, we shall have little difficulty in admitting the relationship of these Sanscrit words denoting "will" to the first numeral in that language. This presumes, however, that the first part of the compound now before us is the element *Fa* = *hva*, denoting relative nearness. The same must be the case with the noun *ἄναξ*, anciently pronounced *Fάναξ*, which, as we shall see, is derived from *Fα-νά*, the older and more correct form of *ἄ-νά*. In *ἐ-γώ*, *ἄγαν*, *aham*, which seem to be connected in meaning with the first Sanscrit numeral, the first syllable is always found without any aspirate. That the aspirate or ultimate guttural, however, was really an essential part of the first syllable of this element, appears from the Latin *secus*, which is clearly the representative of *ἐκας*. We are obliged to infer, then, that although *ἐ-γώ*, *ἄ-γα-ν*, *a-ham*, &c., seem to be connected in meaning with the most emphatic demonstrative, for they imply distance or separation, and though *ἐκας*, &c., bear the same or a very similar sense, all these words are related, in their first syllable as well as in their second, to the second pronominal element, and signify "this which;" for, although *ἄ* may come from *να* as well as from *Fα*, it is impossible that the different elements *ê-*, *ai-*, *se-*, *α-*, *va*, *εὐ*, should have any other common origin than the element *Fa*. And thus the simplest demonstrative root *a*, though in all its appearances it seems to correspond in *value* to the elements of the first or third person, must in this instance be connected in *origin* with the element of the second; the idea of proximity to, having merged in that of identity with, the subject, as in the Italian *ci* mentioned above (§ 150). The etymological fact is certain; the explanation depends upon the exclusively demonstrative nature of the original pronouns. There is, in fact, no reason why the ideas of separation, distance, and unity, should not be expressed by the combination signifying "this which," as well as by one denoting "that which;" and we have seen other instances of this reduplication (§ 133).

276 It will perhaps be as well to explain the three proper names into which the element *ἐκα* enters. *Ἐκάβη* means either an only child,

or one born among the last of her father's family; in either case it is a title of endearment. With regard to the first part, it may be compared with the Sanscrit *eka-ja* = *qui solus natus est* (Bopp, *Gloss. Sanscr.* p. 58): its termination seems to be analogous to that of *λυκά-βας*. The name *Ἐκάλη* was borne by a mythical old woman who was very kind to Theseus in his childhood, and as a by-form of *ἔκηλος* expresses her good nature. This appears from the words of Plutarch (*in vita Thesei*, cxiv.): *τὴν Ἐκάλην ἐτίμων, Ἐκαλλίην ὑποκοριζόμενοι, διὰ τὸ κἀκείνην ἴεον ὄντα κομιδῇ τὸν Θησέα ξενίζουσαν ἀσπάσασθαι πρεσβυτικῶς καὶ φιλοφρονεῖσθαι τοιοῦτοῖς ὑποκορισμοῖς*. *Ἐκα-μήδη* is the name of an active and willing female servant in Homer (*Iliad* xi. 623), and may be compared with *Περιμήδης*, and with *Γανυ-μήδης*, the name of a heavenly menial.

277 The forms *εἵνεκα*, *τοῦνεκα*, *οὔνεκα*, and *ὁθούνεκα* also require some remark. In the first, the preposition *ἐν* appears in the stronger form *εἵν* (above, § 170), which is used by the Attic writers, not only by itself, as in Sophocl. *Antig.* 1226: *εἵν' Αἰδου δόμοις*; Æschyl. *Suppl.* 872: *ἀραιαῖς εἵν αὔραις* (according to Lobeck's emendation; see, however, below, § 475); but also in composition, as in Sophocl. *Antig.* 346: *πόντου τ' εἰναλίαν φύσιν*; Sophocl. *fr.* 480: *τῆς εἰνοδίας Ἐκάτης ἔργος*. This form of *ἐνεκα* occurs in the Attic prose-writers, with the exception of Thucydides, as Thomas Magister tells us: *καὶ ἔνεκα καὶ εἵνεκα, Πλάτων, Δημοσθένης, καὶ οἱ ἄλλοι. Θουκυδίδης δὲ ἀεὶ ἔνεκα*. Of its use in Plato, the following instances may suffice: *Legg.* p. 778 D, p. 916 A, p. 949 D. It has been remarked by F. A. Wolf (*ad Demosth. Leptin.* p. 338) that the form *εἵνεκα* never occurs in the Attic poets, but that they always write *ἐνεκα* or *οὔνεκα* with the same signification. That is to say, when *εἵνεκα* occurs, there are almost always various readings, whereas we often find *οὔνεκα* without any variation in the MSS. It seems, however, quite impossible to suppose that *οὔνεκα* could be used as a mere preposition. It stands precisely on the same footing with *τοῦνεκα* and *ὁθούνεκα*, which are compounds of *τοῦ* and *ὅτου* with *ἐνεκα*, as *οὔνεκα* is of *οὔ* and *ἐνεκα*. Accordingly, the first should signify "on this account," the other two, "on which account;" *τοῦνεκα* also = *τίνος ἐνεκα*, "why?" (Steph. *Thes.* i. p. 1204 G). It would be better, perhaps, to write *τούνεκα*, on the analogy of the other two words. Matthiä (*Gr. Gr.* § 624, 2 obs.) adopts the old derivation of *ὁθούνεκα* from *ὅτι* and *οὔνεκα*, objecting to the obvious etymology from *ὅτου* and *ἐνεκα*, given by Lobeck and Buttmann, that if this had been the case, it should have been written *ότούνεκα*, like *τούνεκα*. But *τούνεκα* is purely Ionic, and the Ionians did not throw the aspirate forwards, for they wrote *οὐκ ἐκάς, ἐπ' ὅσον, κατάπερ*, and so forth, whereas the

Attics would write ὁθούνεκα just as they wrote θῶπλα for τὰ ὄπλα, θῆμέρα for τῇ ἡμέρᾳ, &c. Reisig in his exposition of the *Œdipus Coloneus* (p. cxxviii) advances an opinion still more untenable, for he considers ὁθούνεκα as a compound of ὅθι and οὔνεκα, and translates it *ubi id est, cajus causa quidque fit*. The proper use of οὔνεκα and ὁθούνεκα is, as conjunctions, nearly equivalent to ὅτι, and signifying "that" or "because," a meaning which they seem to have obtained by a kind of attraction or brachylogy, like their synonym ἀνθ' ὧν: Sophocl. *Antig.* 1050:

ἀνθ' ὧν ἔχεις μὲν τῶν ἄνω βαλὼν κάτω.

The fuller form may be surmised from a former line of the same play (237):

τί δ' ἔστιν, ἀνθ' οὗ τήνδ' ἔχεις ἀθυμίαν;

that is to say, ἀνθ' οὗ stands for ἀντὶ τούτου ὅτι, just as οὔνεκα is put for τούτου ἔνεκα, ὅτι. Ammonius has given the distinctions between οὔνεκα and εἵνεκα correctly enough. He says: οὔνεκα καὶ εἵνεκα διαφέρει, οὔνεκα μὲν σημαίνει τὸ ὅτι. εἵνεκα δὲ χάριν. We agree, therefore, with Ahlwardt (*Zweiter Beytr. zu Schneider's Wörterb.* 1813) in thinking, that, as the MSS. in many cases, and common sense in all, authorise the change, we should substitute εἵνεκα, which is acknowledged to be good in Attic prose, for οὔνεκα, whenever it stands for ἔνεκα in Attic verse. Conversely, we have proposed to read οὔνεκεν for εἵνεκεν in Pindar, *Isthm.* vii. [viii.], 33, because we do not believe that ἔνεκα can be a conjunction, any more than we think that the compound οὔνεκα can perform the functions of a mere preposition.

278 (2) The difference between ἔνεκα and χάριν, in their use as prepositions, has been correctly stated by Ammonius: "Ἐνεκα καὶ Χάριν διαφέρει· ὁ μὲν γὰρ Ἐνεκα ψιλὴν τὴν αἰτίαν δηλοῖ, οἷον—ἔνεκα Ἀλεξάνδρου καὶ ἔνεκα Ἑλένης ἐστράτευσεν Μενέλαος· ὁ δὲ Χάριν μετὰ τῆς αἰτίας δηλοῖ καὶ τὴν χάριν—χάριν Μενελάου Ἀχιλλεύς ἐστράτευσεν. τούτεσι, Μενελάῳ χαριζόμενος. In other words, the strength of the motive only is implied in ἔνεκα, while in χάριν we are told the action is intended to please some one, or to benefit him in some way; and, to express the distinction with reference to the original meaning of the two words, ἔνεκα or ἔκατι states that the action has taken place according to the will of a certain person, or with *particular* or *exclusive* reference to some person, thing, or action; whereas χάριν always indicates that the action is done to promote some thing or other, or to please or benefit some person; just as the Germans would say *um meiner Willen* in the one case, and *mir zu gefallen* in the

other. This distinction is obviously preserved in the following line of Euripides (*Helen*. 1254):

πλούτου λέγ' οὖνεχ (*leg. εἵνεχ'*), ὅτι θέλεις ταύτης χάριν·

"with regard to wealth in particular, as far as wealth or expenditure is concerned, say what you would have, for the gratification of this lady." Something of this kind seems to be intended in the opposition of χάριν to ἔνεκεν, which we find in Aristotle, *Polit.* i. 8, § 11: ὥστε ὁμοίως δῆλον ὅτι καὶ γενομένοις οἰητέον τὰ τε φυτὰ τῶν ζώων ἔνεκεν εἶναι καὶ τᾶλλα ζῶα τῶν ἀνθρώπων χάριν.

279 It will be remembered that the Greeks said not only Ἀθηναίων χάριν, but also τὴν Ἀθηναίων χάριν (Herod. v. 99); also ἐμὴν χάριν, σὴν χάριν, like *mea gratia*, *tua gratia*. Besides these modes of expression, we find ἐν χάριτι τινός or τινί, like ἔνεκα=ἐν ἔκα, and πρὸς χάριν τινός. The last phrase, πρὸς χάριν, has created some difficulty in two passages of Sophocles, as to whether it should be taken with the genitive cases with which it is found, or absolutely, in the sense of *ut volupe est*; it will not, therefore, be irrelevant to attempt a settlement of the question. The two passages are as follows; *Antig.* 29; ἔἄν δὲ (Πολυνείκους νέκυν) ἄκλαυστον, ἄταφον, οἰωνοῖς γλυκὴν θησαυρὸν εἰσορῶσι πρὸς χάριν βορᾶς.

Philoct. 1155:

ἔρπετε, νῦν καλόν,
ἀντίφονον κορέσαι στόμα πρὸς χάριν
ἐμᾶς σαρκὸς αἰόλας.

It would be absurd to say that πρὸς χάριν cannot be taken absolutely; in which case it means "to please oneself," as in Sophocles *apud Athenæum*, p. 220: πρὸς χάριν τε κοῦ βίᾳ, Eurip. *Supplices*, 385: πρὸς χάριν θάψαι νεκρούς. And so πρὸς ἡδονήν is put absolutely in Æschyl. *Agam.* 262 (unless we read ἰχθῦς); Eurip. *Medea*, 771; although it is found with a dative in Æsch. *Prom.* 502; Eurip. *Iphig. in Aul.* 1022. We have πρὸς ἔχθραν (Dem. c. *Apatur.* 900, 12), and πρὸς ἀπεχθείαν (*Ib.* 901, 21). In the second passage of Sophocles we should be inclined to take πρὸς χάριν in this adverbial sense, but in the first we are convinced it stands in the relation of a preposition to βορᾶς. The following reasons will perhaps make it clear that such is the case. First of all, it must strike any one who has any feeling for Greek construction that the words πρὸς χάριν βορᾶς come naturally together; for χαρίζεσθαι is particularly applied to setting food before people, as when Homer says (*Odys.* i. 140):

σῖτον δ' αἰδοίη ταμὴν παρέθηκε φέρονσα,
εἶδατα πολλ' ἐπιθεῖσα, χαριζομένη παρόντων.

And this seems to have occurred to the Scholiast on the passage of Sophocles, when he wrote: ἤγουν τίς αὐτοῖς βορὰν χαρίζεται, and to Euripides (*Suppl.* 282): μὴ ἀτάφους χάριματ' ἀθηρῶν παῖδας κατ'ίδης. That πρὸς χάριν can stand with a genitive as well as by itself is known to all scholars; in Pind. *Ol.* viii. 10, ἀνεται δὲ πρὸς χάριν εὐσεβίας, we must clearly take the genitive with πρὸς χάριν, "it is accomplished by prayers on account of—for the gratification of—in return for piety;" and in Sophocles, *Antig.* 908, we have: τίνος νόμον πρὸς χάριν. Similarly, we have in Eurip. *Med.* 541: πρὸς ἰσχύος χάριν; and so Eustathius evidently construes the passage quoted from the *Antigone*: καὶ αὐτοῖς οὐ τοῖς ἀπλῶς, οἶον καὶ τοῖς σπερμοφάγοις, ἀλλὰ τοῖς πρὸς χάριν ὁρῶσι βορᾶς τῆς ἀπὸ τῶν σαρκῶν (*ad Pl. O.* p. 719, 9), only he has not seen the force of εἰσορᾶν, which means "to look at anything with longing eyes," as in Xen. *Cyrop.* v. 1, § 15 (quoted by Sturz, *Lex. Xen.*): οὔτε τοὺς καλοὺς εἰσορῶ, οὔδ' γε σοὶ συμβουλεύω ἐν τοῖς καλοῖς ἔαν τῇν ὄψιν διατρίβειν. The sense of the lines of Sophocles evidently is "Creon ordered that the body of Polynices should be left unwept and unburied, a welcome store for birds, when they are looking out with greedy eyes for a dinner."

280 The numerous and important family to which χάρις belongs is deserving of a more minute attention than it has hitherto met with. There are, indeed, few sets of words in the Greek language to which researches, such as those in which we are engaged, could be more profitably applied. We may divide the words with which χάρις is connected into two classes; first, those which contain the root χα-, with or without an affix; secondly, those which contain the quasi-root χαρ- or exhibit the termination -ρα. To the first belong χάω, χάος, χαίνω, χάσκω, χανδάνω, χάζομαι, χαῖνος, χήλη, χεῖά, χεῖλος, χέλυνς, χαλάω, χατέω, σχάζω, and σχίζω. To the second, χάρις, χεῖρ, χερμαῖς, χοιράς, χέρσος, χορός, χώρα and χῶρος. If we examine the words of the first class, we shall see that the prevailing and prominent meaning is "opening" or "openness." In this the idea of "hollowness" is implied, and, as that which is hollow may be either full or empty, the contrasted notions of content and vacuity are also conveyed by words of this class. When the termination -ρα, which implies motion or continuance, is appended to this root χα- signifying "to lay open," the idea of extent or surface naturally results. And thus we find that the words of the second class imply a surface, something laid flat or open, and by inference, a support or basis, something to rest upon. This meaning appears most clearly in the words χώρα, "a tract of country," χῶρος or χορός, "a piece of land," which, though differing in the extent or space signified (§ 229), equally denote a hard, level

surface. The word *χορός* specially designates a square or public place in which the military people of ancient Hellas met to celebrate their gods with songs and dances of a military character: hence the epithet *εὐρύχορος* which is applied to the ancient cities. The use of *χορός* to denote the people assembled on these occasions is quite a secondary one. We have hinted elsewhere the connexion of *χορός* with *χῶρος*, *χώρα* (*Theatre of the Greeks*, 6th edition, p. [11], note); that this etymology is the true one is clear from what the King says to the Chorus, in Æschylus, *Supplikes*, 796: *λαῶν ἐν χώρῳ τάσσεσθε* (see *Introduction to the Antig.* p. xxix, note). In speaking of the open sea, Thucydides uses *εὐρυχωρία*, in direct opposition to *στενοχωρία*, and as synonymous with *πέλαγος* (vii. 49). The latter word, which is connected with *πλάξ** (*Pind. P. i. 24: ἐς βαθεῖαν πόντου πλάκα*), and not with *πλέω*, as Scott and Liddell suppose (*Lexic. s. v.*), always means "the high sea;" whence *πελάγμιος* means "out at sea," Thucyd. viii. 44; Polyb. iv. 41, § 2.

281 We find the same root in *χέρσος*, which has the collective ending *-σος* subjoined, and designates the hard, dry land, as opposed to the sea. It is also an adjective used as an epithet of *γῆ*, and meaning "hard," "untilled," "unbroken by the plough:" Sophocl. *Antig.* 251: *στυφλὸς δὲ γῆ καὶ χέρσος, ἀρδῶξ οὐδ' ἐπημαξευμένη τροχοῖσιν*; whence it is applied to unmarried women, *Ed. Tyr.* 1502: *δηλαδὴ χέρσους φθαρήναι κἀγάμους ὑμᾶς χρεῶν*: by a metaphor similar to that which Creon uses (in the *Antigone*, 569) in answer to the question of Ismena:

Ισμ. ἀλλὰ πτενεῖς νυμφεῖα τοῦ σαντοῦ τέκνου;

Κρ. ἀρῶσίμοι γὰρ χάτερων εἶσιν γύαι.

The use of *χοιράς* is much the same as the ordinary one of *χέρσος*. The collective ending of the latter renders it more applicable to signify an extended, continuous surface of dry land, whence *χερσόνησος* means a quasi-island connected at one end with the main-land, a peninsula, whereas *χοιράς* signifies an island entirely surrounded by water; thus Delos is called *Ἀηλία χοιράς* (Æschyl. *Eumen.* 9). It does not signify a rock under the water, as the Scholiast on Pindar says (*ad Pyth.* x. 81), but merely something hard and fixed against which a ship might strike, and thus it is used as an epithet of *πέτρα*

* We may mention *obiter* that the *πλαγκτοὶ δίπλακες* of Æschyl. *Pers.* 269, appear to us to describe the *ἀντιπλήγες ἀνταί* of the Straits of Salamis: see our note on the *Antigone*, 588, p. 181. The epithet *πλαγκτός* is well explained by K. O. Müller, (*Klein. Schrift.* i. p. 309) by a reference to the appearance of motion assumed by a coast, when the line of breakers keeps oscillating backwards and forwards.

in the passage of Pindar on which the Scholiast is writing: *ταχὺ δ' ἄγκυραν ἔρεισον χθονὶ πρόραθε, χοιράδος ἄλκαρ πέτρας*. In the plural *χοιράδες* signifies "scrofulous tumours," "glandular swellings," from the general meaning "hard," "projecting," borne by *χοιράς*; just as the Latin name *struma*, for the same disease, is obviously derived from *struo*. It is singular, that another Latin word, by which the king's evil is designated, namely, *scrofula*, is a diminutive of *scrofa*, "a sow," just as *χοιράς* is connected with *χοῖρος*, the common name for a pig (cf. *grice* O. E. and Sc., *gris* Icel.); and *scrofa*, *scrofula* (*scrophula*) are connected with *scrupus*, *scrupulus* and *rupes*, which are synonymous with the more usual meaning of *χοιράς*. There is very little reason, therefore, for deriving *χοιράς* from *χοῖρος*, as Blomfield does (*Gloss. in Æschyl. Pers.* 427). The names of animals seem always to be connected with those of certain qualities which they possess in an eminent degree. When we remember that the hedgehog was also called *χῆρ* or *σχῦρος*, we might suppose that the bristly skin of the hog was described by the name. But as this attribute would be better expressed by another root, Sanscrit *vr̥h*, Greek *φρικ*-, which appear in *varáha*, *φρίσσειν*, and *verres*, and as the whole outer form of the pig and the hedgehog suggests the more general idea of a hard projecting object, it is more reasonable to conclude that the name refers to that appearance of the hog's back, which has given rise to the name of the Surrey hill, mentioned by Blomfield in the note above referred to. The same idea is conveyed by *porcus*, *porca*, which we are inclined to connect immediately with the Sanscrit root *vr̥h*, "to grow up" (Pott, *Etym. Forsch.* II. p. 53); the derivation from *porricere* suggested by Varro and Festus does not seem probable. The root *porc*- signifies not only a pig, but also a balk or high ridge between two furrows; and we have a similar resemblance between the English "farrow" = "a litter of pigs," A. S. *feorh*, "a pig," and "furrow," A. S. *furh*. For another meaning in which *χοῖρος* and *porca* coincide, and which is well known to the readers of Aristophanes, we must refer to the application of *χέροςος* to unmarried women, mentioned above. Although it is clear that *χερμάς* is connected with *χέρ*, it does not therefore follow that it is immediately derived from it, with the limited signification of *λίθος χειροπλήθης*, as the grammarians and Blomfield (*Gloss. in Æschyl. Sept. c. Thebas*, 287) suppose. *Χερμάς* itself indicates only the hardness and roughness, not the size of the stone. Indeed, it appears that the by-form *χεράς* rather implies a collection of small stones, shingle, &c., whence *πάμφορος χεράς* (Pind. *Pyth.* vi. 13), than any one large and heavy stone (see *Journal of Philology*, II. pp. 204 sqq.). The German *hart*, English "hard," are evidently connected with the

quasi-root *χαρ-* in this signification. With regard to *χείρ* itself, the primary meaning seems to be a combination of the ideas of extension and support, out of which the secondary one of taking, holding, &c. very soon developed itself. In this latter sense it is connected with the Sanscrit verb-root *hri*, "to take," the Latin *hir*, and the Greek *αἰρέειν*, *κάρ-πος*, *ἄρπάζειν*, &c. (above, p. 298, note). The verbs *χραύω*; *χρίμπτω*, &c., the primary meaning of which is "to touch" (Ruhnken, *Timæus*, p. 104), are also secondary to *χείρ*. The words *γέν-το'*, *hinthan*, *hand*, *pre-hend-ere*, &c., although bearing the same signification, seem rather to be connected with the *anusvāra* form *χανδάνω*.

282 The idea of "opening" conveyed by the root *χα-* would very naturally be applied to yawning, a wide opening of the jaws, or, in general, to the mouth, the fissure which most frequently meets the eye. Hence we have, as connected with this root, the words *χεῖ-λος*, "a lip," *χά-σκω*, "to yawn," *χά-σμα*, "a yawning," *χά-σμημα*, "the wide opening of a bird's mouth" (Aristoph. *Av.* 61), *χῆν*, "the gaping bird" (*χῆν κεχηνώς*, Athen. 519 A), &c. By a further transition, the secondary root *χα-ρ-* is employed to denote the noise proceeding from a widely opened mouth, the roar of a lion for instance. Hence it is that *χαροπός* and *χάρουφ* are common epithets for the lion, and Hesychius tells us that *χάρων* was a name for that animal: *χάρων· ὁ λέων ἀπὸ τῆς χαροπότητος*. The reason that he gives for it is absurd, for no one would derive *χάρων* from *χαροπός*, though he might derive *χαροπός* from *χάρων*. The idea that the epithet *χαροπός* refers to the colour of the lion is quite erroneous, else how could Lycophron call Achilles *περικνὸς αἰχμητῆς χάρων*? for *περικνός* means black. Hesychius and his commentators had a distant inkling of the truth, as appears from the glosses and notes in Alberti's edition, Vol. II. col. 1544: *Χαροπός. περιχαρής* (we should read *περιφερής* with Suidas), *γλανκός*, *ξανθός*, *φοβερός*, on which Schrevelius writes: *χαροπός—α χάρω, id est, χάσκω, χαρώ, χαρόπω, χαροπός id est ὁ χάσκων. G. Apollon. Schol. p. 62. Χάρυβδις. χάσμα θαλάσσης, Χάρυβδις. ὠμόβροτος. ἢ ἀναπινομένη θάλασσα. Χαροπόν. ξανθόν. γλανκόν. φοβερόν. περιφερῆ, and Salmasius asks: An χαροπός est ὁ χάσκων, idem τῷ χάρων, unde φοβερός exponitur? We believe that *χάρων* and *χάρυβδις* originally meant "the open-mouthed animal" and "the sea that sucked every thing in;" as Hesychius says a few lines lower down: *Χάσμα θηρός· ὅψις θηρός. ἢ [χάσμα πελάγους τὸ τῆς] θαλάσσης πρόσωπον* (according to Faber's reading), but that afterwards *χαροπός* was used with that signification in regard to the lion's mouth, while *χάρων* came to signify the lion in general as a wide-mouthed roaring beast.*

283 There are two reasons which lead us to the conclusion that the lion's roar is particularly referred to in the name *χάρων*. The first is, that Charon (*ὁ χάρων*, "the roarer") is so constantly spoken of in connexion with the *χθονία βροντή*; the following passages among many others will prove this. Diog. Laërt. vii. 28 (*in vita Zenonis*): *ἐτελεύτα δὲ οὕτως. ἐκ τῆς σχολῆς ἀπιὼν προσέπταισε, καὶ τὸν δάκτυλον περιέβόηξε. παίσας δὲ τὴν γῆν τῇ χειρὶ φησι τὸ ἐκ τῆς Νιόβης. Ἔρχομαι τί μ' αὖεις;* Photius, i. p. 301 Porson: *Νοβακκίζειν: τὸ ὀρχούμενον τοῖς δακτύλοις ἐπιφορεῖν· σείσμος Νιόβης.* Athenæus, p. 341 c:

ἀλλ' ἐπεὶ

ὁ Τιμοθέου Χάρων σχολάζειν μ' οὐκ ἔα
οὐκ τῆς Νιόβης, χωρεῖν δὲ πορθμὸν ἀναβοᾷ.

Euripides, *Alcestis*, 252:

ὄρω δίκωπον ὄρω σκάφος, νεκύων δὲ πορθμεὺς
ἔχων χέρ' ἐπὶ κοντῷ Χάρων μ' ἤδη καλεῖ· "τί μέλλεις;
ἐπείρου· σὺν κατέργεις." τάδε τοί με σπερχόμενος ταχύνει.

The many points of contact between *Χάρων*, "the roarer," and *Γηρῶν*, "the caller," are also to be added to the evidence which establishes the etymology of the former name: see *Varronianus*, p. 149, note.

284 Our other reason for drawing this inference, is the perfect analogy that subsists between the root *χαρ-* and the root *βο-* or *βοF-*. Thus we have *χάρων*, "the roaring animal," *βούς*=*βόF-ις*, "the bellowing or lowing animal" (see below, § 470); and here the roots *hr̥i* and *vr̥iḥ*, which so often come in contact, present another parallelism, for as *χάρων* is "the lion," so is *vr̥isha* "the bull" in Sanscrit, from whatever quality the name may be derived; *χάρ-μη* and *βοF-ή*, "the battle-shout," by an extension of usage "the battle itself;" hence *βοήν* *ἀγαθός. ὁ κατὰ τὴν μάχην ἀνδρείος; βοήθου. κατὰ τὴν μάχην ταχύν* (Hesych.), from which comes the word *βοηθεῖν*, "to assist:" also *βοηθεία* and *βοηδρομία*, "a running to a man's assistance in battle." With the same reference we find in Pindar, *Pyth.* ix. 64: *ἀνδράσι χάρμα φίλοις ἄρχιστον*, where the epithet signifies "nearest at hand to protect." So also we have in Æsch. *Ag.* 237: *ἄρχιστον μονόφρουρον ἕρκος*. We have seen the same connexion of the ideas of neighbourhood, presence, and assistance in the word *ἀμείνων* (§ 262). We have it also in the Latin *præsens deus* (Cic. *Tusc. Disp.* i. 12; Hor. *II. Carm.* v. 2): also in *propitius*, which is the antecedent of *præsens*, unless we take the view suggested above (§ 269): cf. *Domitius*, &c., *Ilythia* (old fem. of *ἐλευθώς*) might be rendered *propitia*. From *χάρ-μη*, in a perfectly similar way, we may derive *χραισμεῖν*, which

the Greeks used as a synonym for βοηθεῖν, and also for ἐπαρκεῖν, a word which we will discuss presently (*Schol. on Apollon.* II. 218). In immediate connexion with this words we have χάρις, "help," χοῦν, "to offer help or assistance," and χορησίμος, "a person capable of offering help or assistance." To this also belongs the use of χορεία in *Æschyl. Sept. c. Theb.* 49: ἐξιστορεῖσθαι μοῖραν ἐν χορείᾳ τύχης, and *Soph. Aj.* 963: θανόντ' ἂν οἰμώξαιαν ἐν χορείᾳ δορός. The Greeks, therefore, would have understood why Sir William of Deloraine was called "good at need."

285 A most remarkable confirmation of this etymology will be found in the word ἦρα, which Buttmann has so fully, and, upon the whole, so satisfactorily discussed. The root of this word appears in ἄρ-ης, "war," ἄρ-είων, ἄρ-ιστος, ἄρ-ω, ἄρ-έσκω, θυμ-ήρ-ης, ἐρί-ηρ-ος, ἄρ-μενα, ἄρ-κεῖν, and ἄρ-ήγειν. The element αρ-, ηρ-, which forms the basis of this last set of words, has lost an initial digamma, as appears from a comparison of ἀρετή, ἄρῳ, *arma*, ἦρως, Ὀαρίων, with "war," *Wehr*, *wehren*, *vir*, *virtus*, "warrior;" as *m* is often only another form of *v* (comp. *Mulciber* with *Vulcanus*, the first pronominal element under the forms *ma*, *va*, and the German *meinen* with *wähnen*; *Minne* with *Ven*, *Winnesjäfte*, "friend," "friendship," and *Venus*); we may also compare the words Ἄρης and ἄρῳ with *Mars* and *mas* (*maris*) (Buttmann, *Abh. Ak. Berl.* 1826, p. 58). Now the element φαρ- is obviously related to the Sanscrit root *vr̥*, "to protect" or "shelter," from which comes *vr̥h*, "to grow up," as may be seen by comparing *vīra*, "a hero," with ἦρως and *vir*, and *varīyas* and *varisht'hās* with ἄρειων, ἄριστος (see Pott, *Etymol. Forsch.* I. p. 221). As the root *hri*. "to take," which we shall see has other points of contact with *vr̥h*, the secondary form of this root, appears in χεῖρ, &c., so does this root *vr̥* appear in Φαρίστερος, "the left or shield hand" (above, p. 301). In the words from the root φαρ-, which we have enumerated above, there is precisely the same transition of ideas as in the two sets of derivatives from χάρις and βοή, which we have just been considering. This would be sufficiently clear from Hesychius only, if we had no other means of showing it. See the following glosses: Ἐπίηρα. τὴν μετ' ἐπικουρίας χάριν μεγάλην, ἣ ἐκ τῆς περιουσίας· ὥς Ἀντίμαχος.—Ἐπίηρος. ἐπίκουρος. ἐπιθυμητής.—Ἐπίηρος. βοηθός. χάριν ἀποδιδούς.—Ἐπιήρεα. ἐπιχαρίτια.—Ἡρα. ἦτοι, ὄντως. ἣ χάριν, βοήθειαν, ἐπικουρίαν, πατρὶ φίλῳ ἐπὶ ἦρα φέρων Διί. ἣ ἔφη. And the words of Apollonius: Ἐπίηρα· τὴν μετ' ἐπικουρίας χάριν. Μητρὶ φίλῃ ἐπίηρα φέρων, ἐν δὲ τῷ, οὐδὲ τί μοι ποδάνιπτρα ποδῶν ἐπίηρ' ἂνὰ θυμῷ, τὰ ἐπικουρητικά τῆς ψυχῆς. οὕτως Ἀρίσταρχος. If, in addition to all this, we compare ἐπίηρα φέρειν=ἐπα-

οῆγειν = ἐπαρκεῖν, with ἐπιβοηθεῖν, χάριν φέρειν, and χραϊσμεῖν, we must feel an irresistible conviction that these expressions are all due to the same train of ideas in a Greek mind; that, in fact, the ideas of good, assistance, favour, and pleasure, were evolved in the Greek language from the military feelings of the heroic age.

286 The secondary root *χα-ρ* appears with the pronominal affix *-κ-* in the word *χάραξ* and its derivative *χαράσσω*. It will be desirable to explain these two words. We are told that when *χάραξ* signifies "a vine-prop," it is feminine, when it denotes "a palisade," it is masculine: thus Meris says (p. 372 ed. Koch): *Χάραξ, ἡ μὲν πρὸς ταῖς ἀμπέλους, θηλυκῶς. ὁ δὲ ἐν τοῖς στρατοπέδοις ἀρσενικῶς.* And Phrynichus (p. 61 Lobeck): *Ἡ χάραξ ἐρεῖς θυλυκῶς τὸ τῆς ἀμπέλου στήριγμα, οὐ κατὰ τὸ ἀρσενικόν.* A similar remark is made with regard to *κάμαξ* in the *Etymologicum Magnum*. From this we conclude that the two significations of the word belong to different ages of the Greek language. Now *ἄμπελος* was feminine from the first; and as the vine leans upon and twines round its prop, like a sister, for support, it may be believed that the oldest signification of *χάραξ* was "the supporter or helper of the vine," in which sense its connexion with the family of words we have been discussing is indisputable. In confirmation of this, let us observe that we find in Homer the word *ἄοσσητήρ*, in the sense "a person who stands behind us to help us up" (*Iliad* xv. 735):

ἢ τίνας φάμεν εἶναι ἄοσσητήρας ὀπίσσω.

Now *ἄοσσητήρ* is obviously another form of *ἄοξος*, "a servant" or "helper" (*Æsch. Agam.* 209), and *ἄοξος* means "a branch which grows up by the side of another branch," for, according to Theophrastus (*Hist. Plant.* i. 13), *ὄξος* is that part of a tree from which the branch sprouts out, and consequently, as *ἄ-δελφός* means "he who springs from the same *δελφύς* or womb," so *ἄ-οξος* means "the sister branch," "the branch which derives its origin from the same *nodus*:" therefore *ἄοσσητήρ*, which the Scholiast on Homer (*loc. cit.*) explains by *βοηθός*, conveys the same idea as *χάραξ*, and conversely *χάραξ* may imply a *βοήθεια*, and so it is naturally connected with *χάρις*, according to our former investigation. *Χαράσσω* is of course formed from *χάραξ*, just as *καμάσσω* is from *κάμαξ*; and as *καμάσσω* means "to make like a reed" (*κάμαξ*), that is, "to cause to shake," so *χαράσσω* properly signifies "to make like a stake," that is, "to sharpen," and in this sense the word frequently occurs in the oldest writers. It also signifies to produce the effects of a sharp instrument on some substance, just as *ἀνάσσω* means "to perform the functions of a king" (*ἄναξ*); and it is to this latter sense that we owe the important word *χαρακτήρ*, both

as it is applied to signify "the stamp on a coin," and as it is figuratively used to denote the stamp of mind which distinguishes one man from another. In Hesychius we have the gloss: *κεχαραγμένος*. *ὠργισμένος*, which is supported by Herodotus vii. 1: *μεγάλως κεχαραγμένον τοῖσι Ἀθηναίοισι*, and Eurip. *Med.* 157: *κείνῳ τόσον μὴ χαράσσειν*. This meaning might seem to be derived from the first signification of *χαράσσω*, for *θήγομαι* and *ὀξύνομαι* are used in a similarly metaphorical manner. If, however, the ingenious emendation of Matreas (*apud Athen.* p. 19 D) suggested by Blomfield (*Gloss. ad Pers.* 689) is to be received, we must conclude that the metaphorical use of *χαράσσειν* is derived from the second of the primitive meanings. The passage in Athenæus stands thus: *Ἐποίησε δὲ οὗτος (ὁ Ματρεάς) καὶ παρὰ τὰς Ἀριστοτέλους ἀπορίας, καὶ ἀνεγίνωσκε δημοσίᾳ διὰ τί ὁ ἥλιος δύνει μὲν, κολυμβᾷ δ' οὐ. καὶ διὰ τί οἱ σπόγγοι συμπίνουσι μὲν, συγκωθωνίζονται δ' οὐ. καὶ τὰ τετράδραχμα καταλλάττεται μὲν, ὀργίζεται δ' οὐ.* Blomfield reads *χαράττεται*, which, as a synonym for *ὀργίζεται*, is more in place here than *καταλλάττεται*, which bears just the contrary signification.

287 It has been mentioned before (§ 53) that associations by way of contrast are often expressed by the same root or element in the languages with which we are concerned. This is particularly remarkable in the class of words into which the element *χα-φ-* enters. That the notions of emptiness and containing are both expressed by the simple root *χα-* has already been shown. Now we find precisely the same conversion in the derived root *χα-φ-*, the primary acceptation of which denotes "protection," "good," "benefit," and the feeling of joy which the possession of such things imparts. By the law of association mentioned above, it also expresses the feeling of desire created by the want of such things. Thus *χορῆζω* and *χῆρος* belong to the same family with *χάρις*, *χραισμέω*, *χορῆσθαι*. The ideas conveyed by both these sets of words are included in the single word *χρεῖα*, which denotes both "use" and "need;" and the uncertainty, which arises in some cases as to the proper way of translating this word, shows how nearly these ideas are connected with one another. Hesychius uses *χρεῖαν ἔχων* as an interpretation of *χατέων*, *χῆρος*, and *χορῆζων*, and the doubt entertained by the critics as to whether we should read (*Æschyl. Pers.* 815) *σωφρονεῖν κεχορημένοι*, "in want of teaching," or *σωφρονεῖν κεχορημένον*, "having wisdom," is a sort of proof that the verb also conveys these two ideas (Wellauer and Dindorf *ad l. Æschyl.* and Elmsl. *ad Eurip. Heracl.* 801). We observe the same connexion in the Latin *cārus*, *gratus*, *grates*, and *gratia*, which Passow considers to be connected with this element. *Cārus* may be a corrupted participle

from *cāreo*, just as *pūrus* is a participle of *pūto*; *vērus* of *vereor*; *procērus* of *procello* (where the *e* is short by nature, compare *cōlumen*, *s-cēlus*, *procūlus*, *βου-κόλ-ος*, &c.); *obscurus* of *ob(s)cūlo* = *occūlo*. It is to be observed that the ending *rus* = *sus* (§ 107) is not at all uncommon in Latin words of this class: thus we have *cla-rus*, *glo-ria* (*κλέος*, *κλύω*, &c.); *ca-rus*, *ca-reo* (*χάος*); *seve-rus* (*σέβω*, Umbrian *sevum*); &c. We have a by-form of *cārus* in *cassus*, which seems to be the proper form of a participle from some verb like *χατέω*; compare *fateor*, participle *fassus*. *Grātus* = *cārātus* might be the participle of a derivative verb like *cārāre*, if it existed. It would be foreign to our present purpose to enumerate all the Latin words of this family; otherwise it would be easy to show that the ideas of value, preciousness, consequent difficulty in obtaining, or even striving in vain to get, and therefore being without, are developed from one another in that language also, like the two meanings of the English adjective "dear." Döderlein, therefore, is mistaken when he derives *careo* and *cassus* from *κείρειν*, *καρῆναι*, *carpere*, *κάρφειν* (*Lat. Synon. und Etym.* III. p. 114, note), as opposed to *carus* and *gratus*, which, he admits, are connected with *χάρις* and *χαίρω* (p. 254).

288 Bopp (*Glossar. Sanscr.* p. 404) and Pott (*Etymol. Forsch.* I. p. 272) are inclined to connect *χαίρω* with the Sanscrit *hr̥ish*. The primitive meaning of this Sanscrit root is "to be erect," and it is particularly applied to the hair of the head, whence the epithet *hr̥ishṭa-rômā*, "with the hair of the body on end" (*Bhagavad-Gīta*, XI. 4; Lassen, *Anthologia Sanscritica*, p. 4, l. 9). In a secondary sense, it signifies "to rejoice," "to be elated," "to exult," "to be exceedingly pleased," "to have the hair of the body erect with pleasure;" so that it seems to agree in all its meanings with *φρίσσω* (root *φρικ-*) rather than with *χαίρω*. Whether it is applied to the projecting spears of a body of soldiers, to the erect hairs of the head, to the standing corn, to the first ripple on the sea, or to the appearance of the skin when one is shivering from cold (which we call "goose's skin"), the primary meaning of *φρίκη*, *φρίξ*, *φρίσσω*, is always projection or unevenness in a physical sense; the mental emotion sometimes implied being of course secondary and metaphorical. We have the same idea in the Latin *horrere* (= *horsere*?), *hirsutus*, &c. Although these words are so nearly connected in meaning, it is difficult to pronounce a decided opinion as to their etymological relation to one another. It is clear that *hr̥ish-*, *hirs-*, and *φρικ-*, must be secondary formations, and it is obvious that the first two are the same root. We are inclined to connect *φρικ-* like *porc-*, with the Sanscrit root *vr̥ih*, "to grow," so that this root, the meanings of which bear a great resemblance to

those of $\chi\alpha\text{-}\rho$ -, again approximates, in its secondary lengthened form $\varphi\rho\acute{\iota}\kappa$ -, to a secondary and lengthened form of the other root $h\acute{r}\acute{\iota}$. It is singular that not only does this root $h\acute{r}\acute{\iota}$ agree with $\chi\alpha\text{-}\rho$ - in its military use (for *pra-hrī* signifies "to fight," and *pra-hāra*, "a combatant"), but we find the Homeric $\chi\acute{\alpha}\rho\mu\eta$ even in the modern languages of Europe, as a remnant of the warlike Goths. Thus we have the German *Schirm*, Italian *Scherma*, with one of the primitive meanings of the element $\chi\alpha\text{-}\rho$ -, namely, defence, protection, reliance, &c.; and German *Scharmützel*, Italian *Scherma*, English *Skirmish*, with the common Homeric signification of $\chi\acute{\alpha}\rho\mu\eta$, to which these words are related, as the German *Schaum* to $\chi\upsilon\mu\acute{o}\varsigma$, *Schelm* to $\chi\acute{\alpha}\lambda\lambda\iota\mu\omicron\varsigma$, $\chi\alpha\lambda\acute{\iota}\mu\alpha\delta\epsilon\varsigma$, and *Schief* to $\chi\alpha\beta\acute{o}\varsigma$ (see Döderlein, *Vocabulorum Homericorum Etyma*, p. 14).

289 (3) Before we consider the remaining significations of $\chi\acute{\alpha}\rho\iota\varsigma$ it will be proper to discuss $\delta\acute{\iota}\kappa\eta\nu$, the third of those nouns which are used as prepositions, for it bears a remarkable analogy, in some of its applications, to $\chi\acute{\alpha}\rho\iota\varsigma$. As a preposition with the genitive case, $\delta\acute{\iota}\kappa\eta\nu$ is equivalent to the Latin *instar*, and signifies "like," "after the likeness of." Thus in Pindar (*Pyth.* ii. 84), $\lambda\acute{\upsilon}\kappa\omicron\iota\omicron \delta\acute{\iota}\kappa\alpha\nu$ is "just like (i. e. justly) a wolf;" in Æschylus (*Agam.* 3), $\kappa\nu\nu\delta\varsigma \delta\acute{\iota}\kappa\eta\nu$ means "just like a watch-dog." The use of $\delta\acute{\iota}\kappa\eta\nu$ as a preposition seems to be for the most part confined to the older poets; for, although it occurs even in Plato and Aristotle, it is generally used when an air of quaintness or a poetical colouring is designed. For instance, Plato, *Legg.* vi. p. 773, $\omicron\upsilon \gamma\acute{\alpha}\rho \xi\acute{\alpha}\rho\delta\iota\omicron\nu \epsilon\nu\nu\omicron\epsilon\acute{\iota}\nu, \omicron\tau\iota \pi\acute{o}\lambda\iota\nu \epsilon\acute{\iota}\nu\alpha\iota \delta\epsilon\acute{\iota} \delta\acute{\iota}\kappa\eta\nu \kappa\rho\alpha\tau\eta\acute{\rho}\omicron\varsigma \kappa\epsilon\kappa\rho\alpha\mu\acute{\epsilon}\nu\eta\nu$, seems to be quoting some line from a play, such as $\pi\acute{o}\lambda\iota\varsigma \delta\acute{\iota}\kappa\eta\nu \kappa\rho\alpha\tau\eta\acute{\rho}\omicron\varsigma \eta\nu \kappa\epsilon\kappa\rho\alpha\mu\acute{\epsilon}\nu\eta$; just as, in *Legg.* x. p. 886 E, $\lambda\acute{o}\gamma\omicron\iota\omicron\iota \delta\grave{\epsilon} \tau\alpha\upsilon\tau\alpha \epsilon\acute{\upsilon} \pi\omega\varsigma \epsilon\acute{\iota}\varsigma \tau\omicron \pi\iota\delta\alpha\nu\delta\omicron\nu \pi\epsilon\rho\iota\pi\epsilon\pi\epsilon\mu\acute{\epsilon}\nu\alpha$ ("well incrustated, covered or concealed with words, so as to appear probable"), he seems to have had in his head some line of an old comedian—perhaps $\lambda\acute{o}\gamma\omicron\iota\omicron\iota \delta' \epsilon\acute{\upsilon} \pi\omega\varsigma \tau\alpha\upsilon\tau\alpha \pi\epsilon\rho\iota\pi\epsilon\pi\epsilon\mu\acute{\epsilon}\nu\alpha$; compare Aristoph. *Plut.* 157: $\delta\nu\omicron\mu\alpha\tau\iota \pi\epsilon\rho\iota\pi\acute{\epsilon}\tau\tau\omicron\upsilon\varsigma \tau\eta\nu \mu\omicron\chi\theta\eta\rho\acute{\iota}\alpha\nu$. *Vesp.* 668: $\delta\eta\mu\alpha\tau\acute{\iota}\omicron\iota\varsigma \pi\epsilon\rho\iota\pi\epsilon\varphi\theta\epsilon\acute{\iota}\varsigma$.

290 The sense of $\delta\acute{\iota}\kappa\eta$, which has given rise to this use of its accusative or old locative case as a preposition, is found in Homer, *Odys.* xviii. 274: $\mu\eta\nu\eta\sigma\tau\eta\acute{\rho}\omicron\nu \omicron\upsilon\chi \eta\delta\epsilon \delta\acute{\iota}\kappa\eta \tau\omicron \pi\acute{\alpha}\rho\omicron\iota\theta\epsilon \tau\acute{\epsilon}\tau\upsilon\kappa\tau\omicron$, and in Pindar, *Pyth.* i. 50: $\tau\acute{\alpha}\nu \Phi\iota\lambda\omicron\kappa\tau\eta\acute{\tau}\alpha\omicron \delta\acute{\iota}\kappa\alpha\nu \epsilon\acute{\varphi}\epsilon\pi\omega\nu$, which the Scholiast rightly explains: $\tau\omicron\nu \Phi\iota\lambda\omicron\kappa\tau\eta\acute{\tau}\omicron\upsilon \tau\rho\acute{o}\pi\omicron\nu \mu\epsilon\tau\epsilon\rho\chi\acute{o}\mu\epsilon\omicron\varsigma$, for $\tau\rho\acute{o}\pi\omicron\nu$ is also used in the same way as $\delta\acute{\iota}\kappa\eta\nu$, as in Æschyl. *Agam.* 48: $\tau\rho\acute{o}\pi\omicron\nu \alpha\acute{\iota}\gamma\upsilon\pi\iota\omega\nu$, "like vultures." So also $\delta\acute{\epsilon}\mu\alpha\varsigma$, "the outward build or body of an object," as in Hom. *Il.* xi. 595: $\acute{\omega}\varsigma \omicron\acute{\iota} \mu\acute{\epsilon}\nu \mu\acute{\alpha}\rho\upsilon\alpha\nu\tau\omicron$,

δέμας πυρὸς αἰθομένοιο, which Hesychius explains as *τρόπον πυρὸς καιομένον*, and with this reference he renders δέμας by *μορφή, ιδέα, τρόπος*. Hesychius also recognises the meaning of likeness or similitude here implied, as will appear from the following glosses: *δίκη. ὁ τρόπος—μνηστῆρων* (he refers to the following of the *Odyssee* above quoted); *δίηλον. (1) ἐκτύπωμα. ὁμοίωμα, εἰδωλον, ἀνδρίας, ξφδιον. παρὰ Λάκωσιν. (2) φάσμα, ὄψις, εἰδωλον, μίμημα. ὅθεν καὶ ὁ μιμολόγος παρὰ Λάκωσι, δικηλίστας. (3) ἄγαλμα ἀνδριαντος; δίκην. (1) καθάπερ, ὥσπερ, ὁμοίως. (2) τρόχου (read τρόπον); δίκης. τρόπου. δίκης* (this word should be inserted). *ὁμοίωσις. ἢ κρίσις*. But this is only a secondary sense of *δίκη*. The following considerations will convince us that its primary meaning was "an equivalent," that is, not only a similitude, but an identity. This appears most clearly from the uses of *δίκαιος* in the best writers. Thus we have in Herodotus, II. 149: αἱ δ' ἑκατὸν ὀργυιαὶ δίκαιαὶ εἰσι στάδιον ἐξάπλεθρον, i. e. "one hundred fathoms are exactly or just equivalent to a stadium." Referring to which, as it seems, the *Antiatticistes* says (*Bekk. Anecd.* p. 90, l. 20): *δίκαιον μέτρον: τὸ ἴσον: Ἡρόδοτος δευτέρῳ*. Similarly, Xenophon, *Cyrop.* II. 2, § 26: οὔτε γὰρ ἄρμα δήπου ταχὺ γένοιτ' ἂν βραδέων ἵππων ἐνόντων, οὔτε δίκαιον ἀδίκων συνεξυγμένον, "when the horses are not a pair;" cf. *Soph. Antig.* 292: οὐδ' ὑπὸ ζυγῷ λόφον δικαίως εἶχον. *Ibid.* 662: μένειν δίκαιον κἀγαθὸν παραστάτην, where we have endeavoured to express this idea in our version. That this is really the meaning is shown by the phrase in Plato, *Phædrus*, p. 247 B: τὰ μὲν οὖν θεῶν ὀχήματα ἰσοδόπως εὐήνια ὄντα, because in the allegory the chariot of the human soul is represented as drawn by two horses of different quality, which did not pull well together. In the same way we have (*Hippocr. de Art.* p. 787 B) *δίκαιον σῶμα*, "a body equal on both sides;" (*Id. de Fract.* p. 783 E) *δικαιοῦνται ἀντιδόποιαι*, "perfect equilibrium;" (*Id. Ibid.* p. 772 A) *κατάτασιν δικαίην καὶ ὁμάλην*, "an equal, level extension." It is to this primary sense that the moral, legal, and political use of *δίκη* is due, just as from the similar application of the Latin *æquus* and *iniquus* spring the sense of counterpoise or equivalence. Thus *δίκην δοῦναι, λαβεῖν, ἔχειν, διώκειν*, &c., "to give, obtain, have, or endeavour to get, satisfaction, or an equivalent for some injury," on the principle of the *lex talionis*, which the old Greek legislators considered to be perfect justice. Aristotle, who does not admit of the universal applicability of retaliation (*Eth.* v. 5), and would rather consider *δίκη* as something proportional (*ἀνάλογόν τι*), than as an equivalent (*Eth.* v. 3, § 8), was nevertheless perfectly aware, that, according to the ordinary acceptation of the term in Greece, *δίκη* conveyed the idea of a *quid pro quo*: for he says that inequality

and injustice are synonymous terms, and that to have more than one's share (*πλεονεκτεῖν*) is to commit an injury; the same appears from his ingenious but false derivation of *δίκη* from *δίχα* (*Eth.* v. 4, § 9): τὸ δ' ἴσον μέσον ἐστὶ τῆς μείζονος καὶ ἐλάττονος κατὰ τὴν ἀριθμητικὴν ἀναλογίαν· διὰ τοῦτο καὶ ὀνομάζεται δίκαιον, ὅτι δίχα ἐστίν· ὥσπερ ἂν εἴ τις εἴποι δίκηιον. καὶ ὁ δικαστὴς διχαστής. As *καιρός* often denotes the proper measure or proportion (*Pind. Ol.* ix. 38; *Æsch. Ag.* 760), it is interesting to observe that *ἀκαίρως* is used as a synonym for *ἀδίκως* in *Æsch. Ag.* 781; cf. *Choëph.* 615 [l. *ἀκαίρων*]; *Theogn.* 899 (919).

291 We now return to *χάρις*, which, besides the meanings we have already discussed (namely, good, protection, benefit conferred, and the feeling of joy which such things create), has some applications intimately connected with the primitive sense of *δίκη*. In its widest sense *χάρις* expresses every thing that is graceful, amiable, and charming, and it is therefore very difficult to find any one English word which will generally translate it. As it includes the kindness, which confers a boon or favour, no less than the gratitude which desires to make a suitable return, it may often be rendered by "mutual good will." Perhaps both of these feelings are implied in the use of *χάρις* to denote the worship of the gods; for while the religious act involves the free-will offering of gifts, by which the gods are presumed to be gratified (*Plato, Euthyphro*, 15 A: τί δ' οἶε ἄλλο ἢ τιμὴ καὶ γέρα καί, ὅπερ ἐγὼ ἄρτι ἔλεγον, ἡ χάρις; κεχαρισμένον ἄρα ἐστὶ τὸ ὅσιον), it certainly indicates the gratitude of the worshipper in certain cases, as when we have *εὐκταία χάρις*, "a votive offering" (*Æsch. Agam.* 1360). But *χάρις* also means the worship of sacred objects regarded as a reverence due to them (*Æsch. Agam.* 363: ὅσοις ἀθίκτων χάρις πα- τοῖτο); and in a very difficult passage *Æschylus* seems to say that the reverence due to the deities is forced upon man by suffering (*δαιμόνων δέ που χάρις βίαιος, Agam.* 176: for the meaning of *βίαιος* see *Plato, Resp.* 603 C; and for the sentiment, cf. *Pers.* 409—491, and *Andrewes' Sermons*, Vol. i. pp. 305 sqq. Oxf. ed.). Mythologically, ἡ Χάρις, or more generally in the plural αἱ Χάριτες, are the goddesses who preside over all that imparts a charm to the social relations of man (*Pindar, Olymp.* i. 30: Χάρις, ἅπερ ἅπαντα τεύχει τὰ μέλιχα θνατοῖς. Where the Schol. *Vratisl.* says truly: ἡ χάρις φησὶ τῆς ποιητικῆς γραφῆς. *Olymp.* xiv. 5: Χάριτες—σὺν ὕμνῳ—τά τε τεργνὰ καὶ τὰ γλυκέα γίγνεται πάντα βροτοῖς). The ordinary names of these divinities, *Aglaia*, *Euphrosyne*, and *Thalia*, refer specifically to the kindness of social festivity (see note on *Pind. Nem.* v. 38); and they had an intimate connexion with *Dionysus* (*Schol. ad Pind. Ol.* v. 10; *Pausan.* v. 14,

fin.; Plut. *Qu. Gr.* 36; Apoll. Rhod. iv. 424). And their worship was designed to sanction religiously that interchange of good offices which is the foundation of *δίκη*, or "give and take." Thus Aristotle says (*Ethic.* v. 5, § 6): τῷ ἀντιποιεῖν γὰρ ἀνάλογον συμμένει ἡ πόλις· ἢ γὰρ τὸ κακῶς ζητοῦσιν (εἰ δὲ μὴ, δουλεία δοκεῖ εἶναι, εἰ μὴ ἀντιποιήσῃ)· ἢ τὸ εὖ (εἰ δὲ μὴ, μετὰδοσις οὐ γίνεται, τῇ μετὰδόσει συμμένονσι). διὸ καὶ Χαρίτων ἱερὸν ἐμποδῶν ποιοῦνται, ἵνα ἀνταπόδοσις ᾗ· τοῦτο γὰρ χάριτος ἴδιον· ἀνθυπηρετῆσαι γὰρ δεῖ τῷ χαρισμένῳ, καὶ πάλιν αὐτὸν ἄρξαι χαρισάμενον. And hence the Eumenides, praying that there may be no factions at Athens, say (*Æschyl. Eumen.* 970):

χάρματα δ' ἀντιδίδοιεν κοινοφελεῖ διανοίᾳ,
καὶ στρυγεῖν μιᾷ φρενί.
πολλῶν γὰρ τόδ' ἐν βροτοῖς ἄκος.

At Athens, according to Josephus (*Antiquit.* xiv. c. 8, § 5, p. 699), a common temple was erected to them and the Demus: *στήσαι αὐτοῦ εἰκόνα χαλκῇν ἐν τῷ τεμένει τοῦ Δήμου καὶ τῶν Χαρίτων*; and their statues stood at the entrance to the Acropolis, where they were worshipped with mysterious rites: Pausan. ix. 35, § 3: *Ἀθήνησι πρὸ τῆς ἐς τὴν Ἀκρόπολιν ἐσόδου Χάριτες εἰσι καὶ αὐτὰι τρεῖς· παρὰ δὲ αὐταῖς τελετὴν ἄγουσιν ἐς τοὺς πολλοὺς ἀπόρρητον*. There was a colossal statue of the patroness Juno by Polycletus in the Heræum at Argos, on whose crown the Hours and Graces were sculptured, and their statues were in the Pronaus (Pausan. ii. 17, § 3, 4, and v. 11, § 7). The chief attribute of the Graces was sociability: they are represented as inseparable from one another, and as promoting all kinds of unions among mankind;—that of matrimony, of the family (*πάτρα*), of the civic phratría at the *ἐστίαισις*, of the whole state or race at the public festivals (Müller, *Orchomen.* p. 180). It is with this feeling of the political significance of their worship that Pindar says (*Pyth.* viii. 21):

ἔπεσε δ' οὐ Χαρίτων ἐκὰς
ἅ δικαιόπολις ἀρεταῖς
κλειναῖσιν Αἰαιδαῶν
θίγῃσιν νᾶσος.

for he would hardly have used the epithet *δικαιόπολις* had there not been some connexion in signification between *χάρις* and *δίκη* (cf. Thucyd. iii. 67: *ἀνταπόδοτε χάριν δικαίαν*); his meaning is "the fair-dealing and glorious island of Ægina is not disregarded by the Graces, —for they preside over the intercourse of men, and are also the givers of glory." The epithet *δικαιόπολις*,—which is properly applicable to a man (it is the name of the hero of the *Achærians* of Aristophanes, and is analogous to *ἄπολις*, *ὑψίπολις*, &c.), but is here applied

by personification to Ægina,—refers to the fairness which characterized the commercial dealings of that island, and for which Pindar elsewhere extols its inhabitants. In the same sense, we have explained (*not. ad l.*) *Olymp.* viii. 20 sqq.: where Σάτειρα Διὸς ξενίου πάρεδρος Θέμις is only another name for Δίκη (see Sophocl. *Æd. Col.* 1384: ἡ παλαίφατος Δίκη ξύνεδρος Ζηνὸς ἀρχαίοις νόμοις). In the Pythian hymn quoted above ἔπεσε does not refer to the insular position of Ægina, as Dissen supposes, but is used in the same sense as in Sophocl. *Aj.* 620:

τὰ πρὶν δ' ἔργα χεροῖν
μερίστας ἀρετᾶς
ἄφιλα παρ' ἀφίλοις
ἔπεσ', ἔπεσε μελέοις Ἀτρεΐδαις.

as the Scholiast perceived: ἡ δὲ δικαιοπόλις νῆσος Αἴγινα οὐκ ἐξέπεσε τῶν Χαρίτων, i.e. "Ægina has not fallen or been thrown aside, banished far from the presiding deities of mutual kindness and good will."

292 The etymological connexion of δίκη and χάρις is even more remarkable than their analogy in signification. As χάρις is connected with χεῖρ, the general name for a hand, and with a number of words signifying "to take or hold" (above, p. 298, note), δίκη is obviously connected with δέκ-σιος, the name for the right hand, with δάκτυλος, "the finger," and with a number of words denoting "to receive" (δέχομαι, &c.), or "to point out" (δείκνυμι, &c.), (above, p. 301, note). The element of the word is, as we have seen (above, pp. 294 foll.), a compound of the numeral "two" with a root signifying "to take," and probably connected with the root *hr'i*, which appears in χεῖρ. The form δι- of the first syllable is on the analogy of διά, δί-δυμος, &c., and is more regular and original than the δε- of δέκα or the δα- of δάκτυλος. We have this *ι* in δείκνυμι, where it is affected by *guna*, in the Sanscrit *dic*, and in the Latin *dicis causa*, *dicere*, *digitus*, *dignus*, &c. Herodian remarks (περὶ μονήρων λέξεως, p. 14) that the accentuation of δίκη is very singular, because a barytone noun of this kind ought either to have a consonant before the *κ*, like κίρκη, δίρκη, τρίκκη, or the *ι* should be long, as in νίκη, φρίκη—ἡ τοίνυν δίκη σημειῶδες. λείπει γὰρ ἡ χρόνος ἢ συμφώνως. Nouns in *η*, formed from adjectives in -ικός, are naturally oxytone: but there is no reason whatever why δίκη,—which has no connexion with the pronominal termination -ικός, but it is formed directly from the verb-root δικ- (δίκη for δίκυα),—should not follow the analogy of ἐλίκη, ἐκάτη, μελέτη, &c.

CHAPTER V.

THE ADJECTIVE.

293 Etymological distinction of adjective and substantive. 294 Under what circumstances an adjective or participle may become a substantive or definitive name. 295 This transference is particularly common in Latin. 296 It is also found in Greek. Connexion of the participle with nouns denoting agency and agents. 297 Digression respecting the substantive use of *δύσπρονα* and *γεραιά*. 298 The adjective often represents the genitive case of a substantive, and is sometimes of adverbial origin. 299 Hence the adjective in its distinctive use is merely a syntactical contrivance. 300 Predicable nature of the adjective and participle. 301 The three different kinds of predicates may be expressed by adjectives. 302 Secondary predicates may also be expressed by oblique cases of nouns or adverbs, and to these the tertiary predicate is often attached. 303 Certain adjectives especially used in this way. 304 Epithets and predicates have been confused by great scholars. 305 Familiar illustrations of the general principle. 306 Convertible propositions.

293 **E**TYMOLOGERS have found or created for themselves very great difficulties in the nouns adjective. We do not intend to set forth all the explanations which have been offered with regard to their nature and functions. It will be better to state at once that the adjective differs etymologically from the substantive only in being capable of flexion through the different genders of the substantive to which it is joined. Otherwise it is as much the designation of a quality or attribute, and therefore as truly a *noun*, or the name of a thing, as the substantive itself. As for the compound adjectives, they are in many languages merely substantives subjoined to adjectives. In general, the explanation of the adjective belongs to syntax rather than to etymology.

294 To the student of Greek the adjective is particularly interesting, and especially in its connexion with the participle, a kind of word of which more use is made in Greek than in any other language, insomuch that the Greeks have been emphatically called *φιλομέτοχοι*, or lovers of participles. While in this language—more perhaps than in any other—adjectives and participles are employed to express all the adverbial or accessory relations of the sentence, a great number of adjectives have taken their station amongst the most common of the substantives, and there is no single Greek adjective or even participle which may not become a substantive if it only has the

definite article prefixed, if, in a word, it has that accompaniment which is necessary for the conversion of a substantive, as the name of a quality or attribute, into the name of a particular thing*. Indeed, to such an extent has this been carried, that many adjectives, especially those ending in *-κή*, which have obtained a substantive use by prefixing the article and omitting the substantive *τέχνη*, have at last become so completely substantives, that the article is always omitted, except in those cases where a substantive would require this auxiliary (see Middleton *On the Greek Article*, pp. xxi, 50, note, edit. Rose). This restricted employment of a general attribute may be compared with the use of *βασιλεύς* without the article, when a particular king, *the king of Persia*, is meant, so that the general term becomes a *proper name* or appropriated word.

295 The use of participles as mere adjectives is undoubtedly much more common in Latin than in Greek, and the reason is this, that as the Latin language has no definite article, the distinction between *ὁ φιλῶν*, "the lover," and *φιλῶν*, "if he loves," cannot be expressed by this part of speech. It becomes therefore a matter of indifference whether we use the Latin participle as a definitive or as a hypothetical word; but in all cases where a distinct protasis was intended, the participle would give way to the conditional sentence. Conversely, all the functions of an adjective would be assumed by a participle whether active or passive. The passage from this to the substantive use of the participle is immediate. Thus the active participles *adolescens*, *parens*, and *sapiens*, are constantly found as substantives; *secundus* is always an adjective, and is generally used in a metaphorical or applied sense. The passive participles *acutus*, *argutus*, &c. are almost always employed as epithets, and the neuters *præceptum*, *dictum*, *scriptum*, *consultum*, *placitum*, *furtum*, &c. are to all intents and purposes substantives. Some of the participles in *-ns* have their comparative and superlative degrees like the ordinary adjectives. Thus we find *parentior*, *utentior*, *appetentior*, and *appetentissimus* (Lübker, *de participiis Græcis Latinisque*, p. 12). In some cases we have actually to reproduce the participial meaning by a close examination of some common noun. There is an interesting exemplification of this in the words *pons* and *fons*. From the root *pos*, strengthened by *n* in the present of *po[s]-no*, *pos-ui*, we have the

* When the Anglo-Saxon present participle is used as a noun, it is distinguished by a weaker form of inflexion (Latham, *Eng. Lang.* p. 71, ed. 2). This appears to us to indicate the absence of a definite article: comp. the H. G. *der gute Mensch* with *guter Mensch*.

participial noun *pons*=*pos-nts*, which had a primitive form *pos* (Varro, *L. L.* Vol. I. p. 3 Müller), and this conveyed the idea of laying down heavily, whether this signified that a mass of stones was thrown into the water (*πέ-φουρα*), or generally that there was a weight which caused an inclination of the scale. This, no doubt, is the origin of *s-ponte*, which refers to the momentum of moral inclination, and thus we get the explanation of the *ponti-fex*, who settled the atonement by the imposition of a fine, i.e. a certain weight of copper, as opposed to the *carni-fex*, who took satisfaction on the body of the delinquent. Hence we have the secondary forms *pendo*, *pondus*, &c. Similarly, from the root *fo*=*svo* or *hvo*=*χεF-* for *χFε-*, "to pour out," we have the participial noun *fons*, "that which pours forth water," i.e. "a fountain," and from this the secondary forms *fundo* and *fundus*. That these roots *fo*=*svo* or *hvo*, and *po* or *spo*, "to pour forth" or "cause to fall," have an identity of signification as they probably have a community of origin, may appear from the connexion of meaning between *χῶμα* and *pons*, between *σπένδω* and *fundo*.

296 The Greek participle is not used as a substantive except in cases analogous to those which we have just discussed, namely, when the hypothetical use of the word has become quite indistinct. Thus the nouns *ἄγνια*, *ἄρπνια*, *ὄργνια*, &c., though obviously participles from the roots *ἀγ-*, *ἀρπ-*, *ὄρεγ-*, &c., never occur except as feminine substantives. The same remark applies to the proper names *Εἰλειθῦνία* and *Κάλχας*, though the former signifies the pains of childbirth as well as the goddess: so Hesych.: *εἰλειθυίας ἐνίοτε μὲν τὰς θεάς, ἐνίοτε δὲ τὰς ὀδύνας*; see Hom. *Il.* xix. 119, where the Scholiast explains *σχέθε δ' εἰλειθυίας* by *ὠδῖνας ἔπεςχεν*. The form *ἐλευθῶ* shows us the connexion between the feminines in *-νία* and *-ω*; see above, § 257. (For the participial origin of *Κάλχας*, see our note on the *Antigone*, p. 136, and compare the subsequent remarks of Pott, *Zeitschr. f. vergl. Sprf.* vi. p. 114, vii. p. 244). It seems that *ἐλέφα(ν)ς* is not a participial word, but a corruption of the Semitic name of the elephant, as *aleph hind*, "the Indian ox," just as *tamarind* is *tamr hind*, "the Indian date;" cf. *bos lucanus* (Weber, *Indische Skizzen*, p. 74). The nouns in *-της* and *-τύς* (§ 267) are strictly of participial origin; they are in fact connected with the verbals in *-τέος*. These verbals very nearly correspond in meaning to the Latin gerundiya in *-ndus*, which are merely lengthened forms of the participle in *-nts* (§ 265). The idea of action is explicitly conveyed by the nouns in *-της*, *-τυς*, which denote a doer and a doing respectively. It has not been sufficiently remarked that from the longer form *-τηρ*, *-τωρ*, into which the ending *-της* is occasionally expanded, the Romans formed not only an active future par-

ticiple, but 'also an abstract noun equivalent in meaning to those ending in *-τύς*. Thus, if *scrip-tus* meant "a writing" (cf. the supine *scrip-tum*, "to write"), *scrip-tor* meant "a writer," *scrip-turus*, "a person about to write," and *scrip-tura* again, "a writing." We can scarcely imagine a more interesting subject of speculation to the linguistic philosopher than that which is presented by this class of words. It enables us to see how from the idea of proximity conveyed by the second pronominal element (*-τύς, -τις, σις*) that of emanation is at once derived (*-δης, -θεν*), and how we pass from this to an expression of agency and an agent (*-της, -τηρ, -τωρ*). Then again we observe how the notion of continuity, which is involved in that of agency, connects itself with that of futurity; whence the continuous tense in Hebrew is so often a future (*Maskil le Sophér*, pp. 23 sqq.); and from this we get the idea of obligation, or the feeling that the performance of an act is continuously incumbent upon us (*-τέος*). It is only by considering the matter thus that we can understand the coincidence in meaning between the first and last term of the series *-tus, -τύς, -τέος, -της, -τηρ, τωρ, -tor, -tura*. The Latin and Greek verbals in *-tus, -τύς* strictly correspond in meaning to one another and to the infinitive. In Greek, the adjective in *-τέος*, derived from *-τύς*, corresponds in meaning to the adjective in *-ndus* derived from the participle in *-nts* (above, § 265). But the latter is strictly equivalent in meaning to the infinitive active, of which the so-called gerunds are only inflected cases (see *Varronianus*, pp. 361 sqq.). Every thing therefore tends to confirm the opinion that these expressions all spring from a common metaphysical origin.

297 There are instances in Greek where scholars are still uncertain, whether a particular substantive use or a general adjective use is intended. We will select one or two which affect the proper interpretation of certain passages in the Greek poets.

In Pindar, *Ol.* II. 51, we read: *τὸ τυχεῖν πειρώμενον ἀγωνίας πα-
ραλύει δυσφρόνων*, which must mean "to succeed when one makes trial of, engages in, a public competition, sets a man free from gloomy thoughts" (Schol. *τῶν δυσκόλων φροντίδων τῶν ἐπὶ τῇ νίκῃ ἀπολύει*), so that *δυσφρόνων*, though in form an adjective, is equivalent to a substantive. Dindorf, whose remarks (Steph. *Thesaur.* II. 1801 B, s. v. *δυσφρονή*) have been borrowed without acknowledgment by the Eton editor of Pindar, reads *δυσφρονᾶν*, because "non apparet quomodo *δύσφρονα* πρὸς *δυσφροσύναι* vel *φροντίδες* dici potuerit." He quotes Hesiod, *Theog.* 102: *αἰψ' ὄγε δυσφρονέων ἐπιλήθεται οὐδέ τι κήδεων μέμνηται*, as another example of the feminine form *δυσφρονή*; but here *δυσφρονέων* is the participle, and if Hesiod had intended to use the

noun, he would have said *δυσφροσύνη*, as in *Theog.* 528: *καὶ ἐλύσατο δυσφροσυνάων*. That the neuter *δύσφρονα* may be used as a noun equivalent to *δυσφροσύνη* is proved not only by *Æsch. Choëph.* 272: *τὰ μὲν γὰρ ἐκ γῆς δυσφρόνων μειλίγματα βοροῖς*, "the fruits of the earth which soothe gloomy thoughts for mortals," i.e. drive away dull care; but also by the converse use of *εὐφρονα* for *εὐφροσύνη* in the *Eumen.* 602: *τὰ πλεῖστ' ἄμεινον εὐφροσιν δεδεγμένη* (see note on *Pind. Nem.* v. 38). And the sentiment that success drives away gloomy thoughts is echoed in another passage of Pindar, *Nem.* iv. 1, where it is said that the merriment of the banquet is the best physician for labours when they are brought to a decision (*ἄριστος εὐφροσύνα πόνων κεκριμένων ἱατρος*).

The word *γεραρός* is in Homer an adjective, and an epithet of honour. Thus Priam, describing Agamemnon (*Il.* iii. 170), says:

*καλὸν δ' οὕτω ἐγὼν οὐπω ἴδον ὀφθαλμοῖσιν,
οὐδ' οὕτω γεραρόν· βασιλῆϊ γὰρ ἀνδρὶ ἔοικε.*

and Antenor, contrasting Ulysses with Menelaus (*Il.* iii. 211), says:

*στάντων μὲν Μενέλαος ὑπείρχειν εὐρέας ἄμους,
ἄμφω δ' ἐξομένω, γεραρότερος ἦεν Ὀδυσσεύς.*

The Scholiast's interpretation of the former is *ἐντιμον*, of the latter *ἐντιμότερος πρὸς ὄψιν*, and we have no doubt he is right; *γέρας*, *γέρον*, and *γερόνιος* or *γέρον* are explained in the same way by Hesychius: *γέρον. ἐπὶ μὲν τοῦ ἐντίμου—κίκλησκειν δὲ γέροντας ἀριστίας* (*Iliad* ii. 404), *γέρας γὰρ ἡ τιμή· γερόνιος ἐντιμος, γέρον· γέρον, ἐντιμος*. *Γεραρός* is formed by the common suffix *-ρός* from the word *γέρας*, "the privilege or peculiar gift of a person in authority,"—e.g. the first share of the booty and so forth—especially "the hereditary privileges and prerogatives of a king:" in which sense it was equivalent to *ἔρανος* (see Welcker, *Trilog.* p. 381, note). Hence Thucydides says of the old kings of Greece (i. 13): *πρότερον δὲ ἦσαν ἐπὶ ῥητοῖς γέρασι πατρικαὶ βασιλεῖαι*: accordingly *γέροντ-ς* (*γέρων*) was a person holding such privileges or authority, and *γεροντία* or *γερονσία* was the name given to the ruling Senate at Sparta. The root of the word is *gri-*, "to take" or "receive," one of common occurrence in all the languages of the Indo-Germanic family, and probably the same with *hr̥*, of which we have said so much in the last chapter (see also p. 298). We do not believe that it is connected with *γῆρας*, "old age," which seems to be related to the Sanscrit root *jri* (*jara*), "to wear away;" and the use of *γέρον*, *γεραῖός*, as an apparent synonym for *γηραῖός*, is to be explained from the connexion of the ideas of age and dignity in the Greek mind. So that Homer says, very appositely for our purpose (iv. 323):

κελεύσω

βουλῇ καὶ μύθοισι· τὸ γὰρ γέρας ἐστὶ γερόντων.

In Euripides (*Suppl.* 42),

ἱκετεύω σε, γεραία, γεραρῶν ἐκ

στομάτων πρὸς γόνυ πίπτουσα τὸ δόν,

we believe that the idea intended to be conveyed by the words *γεραία* and *γεραρῶν* is not that of age, though both *Æthra* the person addressed, and the chorus who are speaking, are represented as old women, but that of veneration or respect: "I beseech you, O honoured dame, with a mouth paying you due respect, and falling down at your knee." As *γεραρός* is used as an epithet of the person who receives the *γέρας*, so *γεραίρειν* is employed to denote the act of bestowing the *γέρας*, as when a greater share of any thing is given to a distinguished man (Homer, *Iliad* vii. 321):

νώτοισι δ' Ἀίαντα διηνεκέσσι γέραιρεν
ἥρως Ἀτρείδης.

Or when the worship of a divinity is spoken of (Plato, *Legg.* vii. 799 A): *χορείαις ποίαισι γεραίρειν τὴν τότε θυσίαν*. There is no doubt, then, as to the meaning of the adjective or epithet *γεραρός*. But there are two passages of *Æschylus* in which this word is clearly used as a substantive, and in both we have a dative plural. They are, *Supplices*, 726:

καὶ γεραροῖσι πρεσ-
βυτοδόκοι γεμόν-
των θυμέλαι φλερόντων θ'
ὥς πόλις εὖ νέμοιτο.

and *Agamemnon*, 722:

ἔθρεψεν δὲ λέοντα
σίην δόμοις ἀγάλακτον
οὕτως ἀνὴρ φιλόμαστον,
ἐν βίотου προτελείοις
ἄμερον, εὐφιλόπαιδα,
καὶ γεραροῖς ἐπὶ χαρτον.

In consequence of the word *πρεσβυτοδόκοι*, which precedes in the first passage, and *εὐφιλόπαιδα* in the second, every one has been led, not unnaturally it must be confessed, to translate *γεραροῖς* in both passages "the aged men." A little examination will show that the word is in both passages a synonym for *γέρας*. That *γεραροῖς* does not mean "old men" in the first passage is clear; for how can altars, or rather the terraces round the altar (*θυμέλαι*: see Müller, *Anhang zu den Eumeniden*, p. 35) be said to be loaded like a ship with freight

(γέμειν), and to blaze (φλέγειν) *with old men*? That old men crowded round the altars is sufficiently stated by the epithet *πρεσβυτοδόκοι*, and the addition of a synonym for *πρεσβυταῖς* would be very unlike Æschylus. That *γεραροῖς* does not signify *persons* in the second passage is clear from this, that when *ἐπίχαρτος* governs a dative case of the person it always has the meaning "rejoiced over as by an enemy:" thus Æschyl. *Prometh.* 164: *ἐχθροῖς ἐπίχαρτα πέπονθα* (see the passages quoted in Blomfield's note); Thucydides, III. 67: *οἴκτου δὲ ἀξιώτεροι τυγχάνειν οἱ ἀπρεπές τι πάσχοντες τῶν ἀνθρώπων· οἱ δὲ δικαίως, ὥσπερ οἶδε, τὰ ἐναντία ἐπίχαρτοι εἶναι*; and so *ἐπιχαίρω*, when it governs the dative, as in Soph. *Aj.* 940: *οἱ δ' οὖν γελώντων καπνυχαιρόντων κακοῖς*; but when the verb governs the accusative, it expresses merely a symple act of joy, like *χαίρω*, *γῆθῶ*, &c. with the same government (see Sophocl. *Aj.* 136, and Lobeck), and so *ἐπίχαρτος*, without a dative of the person, signifies "joy-causing, agreeable," as in Sophocl. *Trachin.* 1262: *ὡς ἐπίχαρτον τελέουσ' ἀκούσιον ἔργον*, where the Scholiast rightly compares the Homeric *ἐκὼν ἀκοντί γε θυμῷ*. If, therefore, in the passage of the *Agamemnon* we take *γεραροῖς* in the sense "by means of gifts," we shall have the natural signification, "the young lion was tame, it gambolled with children, and was agreeable or pleasing, it caressed any one—when it was fed," just as he says afterwards (725): *φαιδρωπὸς ποτὶ χεῖρα σαίνων τε γαστρὸς ἀνάρκαις*. That *γεραροῖς*, in the other passage, means "with sacrificial offerings," is shown by the use of the word *φλέγειν* (so in the *Agamemnon*, 91: *βωμοὶ δ' ὄροισι φλέγονται*), and by the imitation of the whole passage in the *Electra* of Euripides (720 and following):

*χοροὶ δ' Ἀτρειδᾶν ἐγέραιρον οἴκους·
θυμέλαι δ' ἐπίτναντο χου-
σήλατοι, σελαγεῖτο δ' ἄν' ἄστν
πῦρ ἐπιβώμιον Ἀργείων.*

We conclude, therefore, that in these passages *γεραροῖς* represents the dative plural of *γεραρόν*, which has become permanent as a neuter substantive equivalent to *γέρας* just as the still longer, but analogous, adjective *λυτήριος* is used by Pindar (*Pyth.* v. 99) in the neuter, as a synonym for *λύτρον* (see below, § 304).

298 We have stated that the etymological distinction between the adjective and substantive is, that the former is generally capable by its inflexions of being attached to substantives of every gender. It will be easy to show that this sole etymological difference is the result of the syntactical use of adjectives. A great number of possessive adjectives are nothing more than genitive cases attracted by juxtaposition into a variety of inflexions. For instance, if, as is most

probable, an older form of the genitive of $\delta\eta\mu\omicron\varsigma$, $\delta\eta\mu\omicron\iota\omicron$, was $\delta\eta\mu\omicron\sigma\iota\omicron$, what is this in relation to $\delta\eta\mu\omicron\sigma\iota\omicron\varsigma$, but the crude-form of a new system of inflexions? The same may be said of the comparative in $-ιων=-ιον-ς$, which refer to the still older genitive in $-ιον=-σιον$ (§ 165), and the weakened genitive may still be recognised in such adjectives as $\chiρ\upsilon\sigma\epsilon\omicron\varsigma$ from $\chiρ\upsilon\sigma\acute{\omicron}\varsigma$. Mr. Garnett, who has referred to this principle in his instructive paper "On the Formation of Words, by the further Modification of Inflected Cases" (*Proceed. of Phil. Soc.* Vol. III. pp. 9 sqq.; *Essays*, pp. 260 sqq.), seems to have overlooked the distinction between those nouns which are formed from oblique cases, by the mere appendage of a new system of inflexions, and a different class of secondary structures, which affix to the new crude-form the pronominal terminations enumerated in a preceding chapter. Thus, it is plain to see on the one hand, that $\delta\eta\mu\omicron\sigma\iota\omicron-ς$ is merely the genitive $\delta\eta\mu\omicron\sigma\iota\omicron$ made the vehicle of a new set of case-endings, and that $\chiρ\upsilon\sigma\epsilon\omicron\varsigma$, $\chi\iota\omicron\upsilon\epsilon\omicron\varsigma$, &c. are similarly derived from weaker forms of the genitive. But it is equally clear, on the other hand, that a form like $\zeta\phi\iota\omicron\varsigma$ contains something more than an oblique case and a new system of case-endings; and a comparison of $\zeta\phi\iota-κλ\eta\zeta$, $\omicron\lambda\acute{\epsilon}\upsilon\varsigma$, &c. would lead us to doubt whether the first part is to be regarded as merely the dative of $\zeta\varsigma$. The same remark applies to the forms $\eta\mu\epsilon\rho\acute{\eta}\sigma\iota\omicron\varsigma$ and $\eta\mu\acute{\alpha}\tau\iota\omicron\varsigma$, which Mr. Garnett would derive from the datives $\eta\mu\epsilon\rho\eta\sigma\iota$ and $\eta\mu\alpha\tau\iota$, but which appear to us to be formed from the nominatives $\eta\mu\epsilon\rho\eta$ and $\eta\mu\alpha\tau=\eta\mu\alpha\rho\tau$, by the addition of the affixes $-σι\omicron\varsigma$ and $-ι\omicron\varsigma$ (above, § 254). Nor does there seem to be any necessity for deriving $\omicron\kappa\epsilon\iota\omicron\varsigma$ from $\omicron\kappa\omicron$ or $\omicron\kappa\epsilon\iota$, when the appendage of $\iota\omicron\varsigma$ to the regular crude-form $\omicron\kappa(\acute{\epsilon})$ of $\omicron\kappa\iota\omicron\varsigma$ suggests itself at once. With regard to forms like $\beta\acute{\iota}\iota\omicron\varsigma$, we should compare them with $\iota\sigma\alpha\acute{\iota}\omicron\varsigma$, $\tau\rho\iota\tau\alpha\acute{\iota}\omicron\varsigma$, &c. from $\iota\sigma\eta$ [$\mu\omicron\iota\zeta\eta$], $\tau\rho\acute{\iota}\tau\eta$ [$\eta\mu\epsilon\rho\alpha$], &c.; and though, according to the principle laid down above (§ 165), the comparatives $\mu\epsilon\sigma\alpha\acute{\iota}\tau\epsilon\rho\omicron\varsigma$, $\iota\delta\iota\alpha\acute{\iota}\tau\epsilon\rho\omicron\varsigma$, $\iota\sigma\alpha\acute{\iota}\tau\epsilon\rho\omicron\varsigma$, &c. presume a derivation from the locative adverbs $\mu\acute{\epsilon}\sigma\eta$, $\iota\delta\acute{\iota}\alpha$, $\iota\sigma\eta$, &c., we must not apply this to the very different case formations in $-ι\omicron\varsigma$ from the nominative in $\eta=y\alpha$ (above, § 254). This is still farther indicated by the accent of $\pi\alpha\lambda\alpha\iota\omicron\varsigma$, compared with that of $\iota\sigma\alpha\acute{\iota}\omicron\varsigma$, &c., for this shows that the affix, by which the adjective was formed from $\pi\acute{\alpha}\lambda\alpha\iota$, contained at least an additional ι , so that $\pi\alpha\lambda\alpha\iota\omicron\varsigma=\pi\alpha\lambda\alpha\iota\iota\omicron\varsigma=\pi\alpha\lambda\alpha\iota\kappa\omicron\varsigma$. There seems to us to be the same objection to Mr. Garnett's theory respecting the derivation of the participle from an ablative of the verbal root. It has been shown above that the ablative sign was something more than a mere $-τ$, that it was in fact the affix $-σιον$, which appears as $-\theta\epsilon\nu$, $-\theta\eta\nu$, $-\theta\alpha$, $-\delta\alpha$. Now it is clear that this, like other forms of the genitive, may become the vehicle of a new set of case-endings, as we see in patro-

nymics in *-δης*, and in the forms in *-διος*, &c. But we have no such forms in the participles, which merely interpose *-φοτ-* or *-ντ-* between the root of the verb and the case-endings. The adverbs in *-δον*, *-δην*, *-δα* are in fact cases of the participles in *-ντ=νδ*, or of the verbal nouns in *δ-*; and it is not consistent with sound philology to suppose that a mere crude-form is equivalent to a case formed upon it. The ablative forms of *currendo* and *cursu* do not prove the ablative nature of *currens*, which is really equivalent to *currendus* (§ 265).

There are many adjectives which are immovable or not capable of a variety of flexion (Lobeck, *Paralipom.* p. 189), and these, when placed by the side of the noun-substantive, constitute it to all intents and purposes one of those compound words in which the genius of the Greek and Sanscrit languages is most strikingly developed, the only difference being, that in the former instance the inflexions of case are preserved, while those of gender are neglected; whereas in the latter the crude-form only is prefixed. Most adjectives, however, vary in gender, number, and case with the noun to which they belong, and are either the predicate of the sentence of which the noun is the subject, or stand as the representative of some case (mostly the genitive) of another noun dependent upon the substantive in question, just as, conversely, the genitive case of a substantive may stand as a substitute for an epithet; see *Soph. Antig.* 114: *χίονος πέτρῳ* for *χιονέη*; *Electra*, 19: *ἄστρων εὐφρονή* for *ἀστερόεσσα*, &c. In much the same way we have, *Soph. Antig.* 795: *ἐναργῆς βλεφάρων ἱμερος*.

299 From this it will be seen that the use of adjective at all is entirely logical or syntactical, for an adjective when distinct from the substantive, that is, when not a mere epithet, is a predicate as contrasted with the subject (above, § 124). Although we do not profess to discuss the syntax of the Greek language in these pages, yet as the very essence of the adjective is syntactical (its etymological distinction being merely an accident), and as its different value, according as it is used with or without the article, is a point which teachers of Greek find it most difficult to impress upon their pupils, we shall indulge in some remarks on the subject.

300 Every noun in the Greek language, however vague and general its signification may be, is capable of forming the subject of a proposition, if it only has prefixed to it that simplest form of the demonstrative, which we call the article; and if two nouns occur in connexion, one of which has, and the other wants, the article, the former is related to the latter as subject is to predicate. This is a fact which must be always kept in mind by every one who would

translate the Greek authors correctly. An adjective, in our acceptance of the name, is an epithet of the substantive with which it is joined, and the difficulty which we experience in practically teaching the Greek language is, to convince the learner, that no noun, though with variable gender, can be considered as an adjective when it stands alone, while the substantive to which it refers has the article prefixed, but that it is always a predicate, or asserts something of the noun, even though they should both of them be in oblique cases. Another assertion of the same principle is, that no participle or verbal adjective in *-ντ*, *-φοτ*-, or *-μενος*, can be considered as an adjective, unless it be subjoined to an article, in which case it is equivalent to the relative pronoun with a finite verb and a definite antecedent. Etymologically considered, the article, the relative, and the affix of the genitive case, are equally derived from the pronoun denoting proximity (§ 148), and the definiteness which is implied by all three is due to the expression of nearness. The difference between the relative and the definite article consists, as we have already seen (§ 243), in this, that the former preserves the subjective form throughout all cases and genders, and has the case-ending in the nominative, whereas the case-ending *s* of the nominative is wanting in the article, because that suffix is appended to the noun with which it is connected, and the element *ta* is used for the neuter and for the oblique cases of the masculine and feminine. Thus we see that the relative is especially subjective, or that its function, when it has a definite antecedent, is to express by periphrasis a definition or epithet as distinguished from a predication or assertion. And this view is not to be qualified by the fact that with an indefinite antecedent the relative sentence becomes hypothetical or virtually adverbial. Considered with reference to its origin, the relative sentence is necessarily definitive or descriptive, and its own true nature is not affected by the occasional circumstance that the antecedent, to which it stands in an adjectival relation, is an adverbial or general term: so that the definition is, like all hypotheses, in that case, of a frequentative nature. Thus, if we say, *Σαρκράτης, ὃς ταῦτα ἐδίδασκε, ἀγαθὸς ἦν*, we make a single predication of an individual specially defined; but if we say, *ὃς ἅν ταῦτα διδάσκη, ἀγαθὸν νομίζω*, we repeat the predication of all who may answer to the definition, which is, in itself, as much a definition as before. Now the Greek participle active, whether it ends in *ντ* = *νδ* or in *-φοτ*-, exhibits the second pronominal element, and implies the mere action of the verb (above, §§ 263, 265), which a set of adjectival inflexions render applicable to its association with a given noun as attribute or predicate. Similarly, the participle passive exhibits the combination of the first element with the third in the form which

expresses the result of the verbs active (§ 410, (1)), and the adjectival inflexions render it available for the same purposes as the active participle. By itself, however, the participle, whether active or passive, defines nothing. It is a mere assumption of the agency implied, and is equivalent to a conditional sentence, or, what is the same thing, to a relative sentence with an indefinite antecedent. Thus *τύπτων=τύπτοντ-ς* means "a person striking, if there is one"—"if any one strikes"—*εἴ τις τύπτει=ὃς ἂν τύπη*. But both the verb and the participle constitute the subject of the sentence, when we prefix to the former the relative pronoun with a definite antecedent: and to the latter the definite article alone. Thus, *κεῖνος ὃς δίδω-τι*, "he who gives"—*ὃ δίδοντ-ς (διδούς)*, "the giver;" and hence it is that the epithet or adjective in the proper sense of the term is equivalent either to the verb with the relative, or to the participle with the article; for *ὁ ἀγαθὸ-ς ἄνθρωπο-ς* is identical in signification with both *ὁ ἄνθρωπο-ς ὃ-ς ἀγαθό-ς ἐστίν* and *ὁ ἄνθρωπο-ς, ὁ εὖ ποιο-ντ-ς (ποιῶν)*. So that, in fact, the adjective, which, from its variety of flexion, requires the guidance of an article, before it can be regarded either as an epithet or as a substantive, that is to say, before it can be used as a subject, is to be considered in the same light with the participle, which differs from the verb only in having variable inflexions. Whereas, conversely, when the adjective and participle stand after an article, and unconnected with any substantive, they are substantives to all intents and purposes, for their variation of gender is excluded by the nature of the case; and adjectives or participles which have been long used in this way may become regular nouns appellative, like the adjectives in *-κή*, or the word *γεγραμμένον*, mentioned above, or even proper names, like *Χάρων, Κάλχας*, and the patronymics referred to in the last chapter (above, § 267).

301 An application of these principles will enable us to classify and explain all the various uses of the Greek participle and adjective. We have seen that the etymological difference between the adjective and substantive is limited to the parallelism of inflexion to which the former and the participle are generally liable: and we have shown generally that this is a formative process arising from the contrivances of syntax. The main business of syntax, as the handmaid of logic, is to distinguish accurately between the subject and the predicate. Now we have endeavoured to show in another place (*Greek Grammar*, Arts. 400, 417), that there are three different kinds or classes of predicates, which we have termed (A) *Primary*, when there is nothing between the subject and the predicate, except the copula, either expressed or implied; thus, in the phrase *οἱ λόγοι ψευδεῖς εἰδέν*, "the words are

false," the adjective *ψευδεῖς* is a *primary predicate*; (B) *Secondary*, when the predicate is connected with the subject through a verb, which already contains a primary predicate; thus, in the phrase *οἱ λόγοι ψευδεῖς ἐλέχθησαν*, "the words were spoken, and they were false" = "the words which were spoken were false," two circumstances are predicated of *λόγοι*, first, the utterance, and, secondly, the falsity; consequently, *ψευδεῖς* is a *secondary predicate*; (C) *Tertiary*, when in the second case there is also a *πρόληψις*, or anticipation of a distinct predication of something additional; in other words, when the whole of the secondary predication is subordinated to a primary predication, which refers to a different subject; thus, in the phrase *ὁ μάντις τοὺς λόγους ψευδεῖς λέγει* (Soph. *Ed. T.* 526), "the prophet speaks words, and they are false" = "the words, which the prophet speaks, are false," we have the secondary predication *οἱ λόγοι ψευδεῖς λέγονται* attached, by *πρόληψις*, to the primary predication *ὁ μάντις λέγει*, i. e. *ἔστι λέγων*, "the prophet is speaking." Now the vehicle of this *πρόληψις* is the accusative case *λόγους*; and oblique cases of nouns, as predicating specially some secondary relation, are themselves secondary predicates. Therefore, the *πρόληψις* is rightly termed a *tertiary predicate*, and this *πρόληψις* is contained in the adjective *ψευδεῖς*, here used in the accusative case.

302 From this we see, that all three classes of predicates may be expressed by the adjective, according to different syntactical usages; but a *primary predicate* might be expressed not only by an inappropriate adjective or participle, but also by an attributive or general substantive, as *μάντις ἦν ὁ Κάλχας*, and by a finite verb considered as including a participle, as *ὁ μάντις λέγει* = *ἔστι λέγων*. Again, the *secondary predicate* might be expressed not only by an adjective in the nominative case, as in the instance given above, but by a similar use of the substantive, as in the line of Homer (*Il.* ii. 673): *Νιρεὺς, ὃς κάλλιστος ἀνὴρ ὑπὸ Ἴλιον ἦλθεν*, where it is predicated of Nireus, not only that he went to Troy, but also, which is the main point, though the secondary predication, that he was the handsomest man among those who went thither. And not only have we the nominative with verbs which admit of this apposition. The oblique cases of nouns are used with all classes of verbs to convey the idea of a secondary predicate; and we have seen that the tertiary predicate is a *πρόληψις* springing out of this usage. If we say for example, *ὁ Σωκράτης ἔχει*, we have a primary predication; for we speak of Socrates as *having*; but the sentence is incomplete; because the transitive verb conveys no definite meaning without an expression of the object. When therefore we add the accusative case *ψυχὴν*, we state *what* it is that

Socrates possesses, and, however little we may be in the habit of regarding the fact from this point of view, we add a fresh predication; for the sentence, ὁ Σωκράτης ἔχει ψυχὴν, is really equivalent to the two sentences, "Socrates is possessed of something, and the thing which he possesses is a soul." The accusative, then, is like the other oblique cases, an *abverbium* or ἐπίρρημα properly so called; i. e. it derives its significance from and through the *verb* by which it stands, or by which it is *governed*, as the phrase is. The particles which we term *adverbs* are merely oblique cases of nouns, pronouns, or adjectives, which express generally the time, place, cause, form, or manner of an action. It is this generality of reference which constitutes the distinction between the adverb and the oblique case of a noun. The latter implies a special object; the former is applicable to all objects. Thus we may say with reference to different objects, ὁ παῖς πατάσσει τὸν ὄνον, or τὸν κύνα; but we may add the expression of manner or degree to any such special statement; as πατάσσει ἰσχυρῶς, or ἀφροντίστως. So also, a dative case expressing the instrument may occasionally become attached to the verb in such a way as to complete its signification, or to take the place of a merely adverbial adjunct; thus κτείνει ξίφει is virtually one word, quite as much as ξιφοκτονεῖ. The Greek idiomatic usage will enable us to explain this satisfactorily with reference to the predication quoted above. The verb ἔχω is constantly used in a neuter sense, or the reflexive pronoun is dispensed with, whenever this verb is construed with εἶ or any adverb in -ως. Thus, it is a complete sentence if we say, ὁ Σωκράτης ἔχει καλῶς, "Socrates is (= has himself) well," *Socrates bene se habet*. To this phrase we may add the specification of a particular object, which will be expressed by the genitive or accusative, according to the reference intended. If we say, ὁ Σωκράτης καλῶς ἔχει τὴν ψυχὴν, we give the immediate object of the verb: "Socrates has his soul well." But if we say, ὁ Σωκράτης καλῶς ἔχει τῆς ψυχῆς, we mean that "as to his soul, he is well," where the sentence is doubly adverbial. The former of these phrases may be expressed equally well by the commonest form of the πρόληψις or tertiary predicate. Thus, if we affirmed the jocular hypothesis, which the philosopher is represented as making in his argument with Callicles (Plato, *Gorgias*, p. 486 D), we might say, ὁ Σωκράτης χρυσὴν εἶχε τὴν ψυχὴν, which would imply, not only that "Socrates had a soul," but also that "the soul which he had was golden." This tertiary predication is particularly common in those cases in which the secondary predication is assumed in the very terms of the expression. For instance, we might assume that "Socrates had a soul," or that "a prophet, if he speaks at all, speaks words." But the same assumption in regard to the objective case is equally obvious

in those passages in which the unwary student is most liable to convert the ulterior predication into an epithet. Thus, in the description of the lines around Plataea, Thucydides speaks of the circumvallation itself as something known and assumed, but he finds it necessary to state that the lines were double, one wall being intended to check the sallies of the besieged, the other to resist the attacks of a relieving army. He says, therefore (III. 21): τὸ τεῖχος εἶχε δύο τοὺς περιβόλους, which most readers would be contented to translate "the wall had two circles," but which must mean that "the circles, which—as a matter of course—it had, were two in number."

303 As all additional references in a proposition are connected with the subject through the root, it is clear that they are all *adverbs* or secondary predicates, if they are in the same case with the subject, but tertiary predicates, if they are connected with some object of the verb, which is itself a secondary predicate. It is also clear that a verb may be the vehicle of any number of such additional and accessory statements. Thus we might ask not only "how Socrates does," but "how he does as to body," or "how he does in regard to health" (Plato, *Georg.* p. 514 D), and we might combine the answer to these two questions in one proposition: καλῶς ἔχει ὁ Σωκράτης τὸ σῶμα πρὸς ὑγίειαν, where it is clear that the verb ἔχει is assisted by three adverbs or adverbial phrases expressing the *manner*, the *object*, and the *relations* of the existing state of Socrates. To return then to our immediate object—the adjective:—as on the one hand, there are adjectives and participles, which have fixed themselves in use as substantives, so on the other hand there are many words with movable inflexions, which have a confirmed tendency towards an adverbial usage; and some of them are then used specially and in a different sense from that which they bear as epithets. Such are the pronouns and adjectives which denote separation, locality, quantity, &c.; e. g. αὐτός, μόνος, μέσος, πᾶς, ἄλλος, ἕκαστος, &c. Not to trouble ourselves with a discussion of the usages of all these words, which would be necessary in a more elementary treatise, it will be sufficient if we take αὐτός as an example of the principle to which we refer. It is well known that if αὐτός has the article it is merely definitive—in fact, it merely strengthens the article. By a little emphasis we can make "the man," ὁ αὐνῆρ, equivalent to "the same man," ὁ αὐτὸς αὐνῆρ. When αὐτός stands by itself and in an oblique case without the article, it is the pronoun of unemphatic reference, like the Latin *is* or the Hebrew affix *י* or *ה*. Thus ἡ γυνὴ αὐτοῦ is perfectly equivalent to *uxor ejus* or *יהוה*. But if αὐτός stands by the side of a noun already defined, and is not itself, by means of the article, included

in the definition, it becomes adverbial, or serves as a secondary predicate; thus *ὁ ἀνὴρ αὐτός* means "the man considered by himself," or "alone." The full force of this adverbial usage is perhaps nowhere so clearly seen as in the idiomatic employment of the dative plural to signify a collective accompaniment. In such phrases as *πέντε ναῦς ἔλαβον, καὶ μίαν τούτων αὐτοῖς ἀνδράσιν* (Thucyd. iv. 14), "they took five ships, and one of these together with its whole crew" or "men and all," we see that the adjunct *αὐτοῖς ἀνδράσιν* is as much a secondary statement as if we had said, in a distinct proposition, *καὶ οἱ ἄνδρες ἐλήφθησαν ὁσάυτως*.

304 Although all this is obvious enough when stated plainly and directly, and though the fact must be known to every one who has any pretension to the name of a Greek scholar, it is, as we have before said, very difficult to impress these distinctions upon the young student; we shall, therefore, make no apology for showing by a few examples the application of the principle to the commonest constructions in Greek. We feel the more justified in doing so as even the most eminent scholars have occasionally fallen into the mistake of confusing the epithet with the secondary or tertiary predicate. These errors may be divided into three classes. (a) When the commentator has mistranslated the existing text. (b) When a true reading is altered from a misapprehension of the construction. (c) When, for the same reason, a corruption is left in the text. (a) The most singular blunder of this sort is that which Brunck, Blomfield, and Wellauer have committed in construing *τῆς εὐπραξίας σωτήρος* in *Æschyl. Sept. c. Theb.* 309:

*Πειθαρχία γάρ ἐστι τῆς Εὐπραξίας
μήτηρ, γυνὴ Σωτήρος. ᾧδ' ἔχει λόγος,*

the meaning of which clearly is "Obedience is the mother of good fortune, and the wife of Jove the Saviour; such is the saying." The last part of the *λόγος* we find in another form in *Soph. Antig.* 676:

*τῶν δ' ὀρθομένων
σώξει τὰ πολλὰ σώμαθ' ἢ Πειθαρχία.*

Hermann, in his edition of Aristotle's *Poetic.* c. iv. § 16, where we have *καὶ τὸν λόγον πρωταγωνιστὴν παρεσκεύασε*, writes as follows (p. 109): *Sextam tragædiæ formam instituit Æschylus, secundo addito actore, unde primarum partium actor exstitit, quem Aristoteles λόγον πρωταγωνιστὴν vocat, male a Twiningio et Buhlio intellectum.* So that he makes *πρωταγωνιστὴν* an epithet, whereas it is a predicate, as it is correctly rendered by Twining ("he made the dialogue the principal

part of Tragedy”), whose interpretation is adopted by Buhle. On Pindar, *Pyth.* v. 99, τὸ κακλίνικον λυτήριον δαπανᾶν μέλος χαρίεν, Böckh writes as follows: “junge μέλος καλλίνικον χαρίεν λυτήριον δαπανᾶν: καλλίνικον est adjectivum ad μέλος, ut *Nem.* iv. 16, atque etiam λυτήριον δαπανᾶν adjectivum est;” and his construction is adopted by Dissen. But, as we have shown in our note on the passage, τὸ λυτήριον is put for λύτρον, so that τὸ λυτήριον δαπανᾶν is analogous to λύτρον καμάτων (*Isthm.* vii. 1), and μέλος χαρίεν is an explanatory apposition: “the triumphal guerdon of his costs, a sweet song.” We might expect to find examples of the same inadvertence in Dr. Arnold’s notes on Thucydides, for perfectly accurate scholarship was not one of the many excellences of that great teacher. Thus in iv. 86, he translates: οὐδὲ ἀσαφεῖ τὴν ἐλευθερίαν νομίζω ἐπιφέρειν, “nor am I minded to offer you a dim and doubtful liberty,” just as he had rendered the parallel passage in the preceding chapter: ἄδικον τὴν ἐλευθερίαν ἐπιφέρειν, “I shall be charged with offering you a false liberty,” although the preceding passage: τὴν αἰτίαν οὐχ ἔξω πιστὴν ἀποδεικνύειν is correctly given in his version: “the reason of your not joining me I shall never be able to make out to men’s satisfaction;” for it is clear that in all three cases there is a prolepsis or tertiary predication —“no one will believe the alleged reason;” “the freedom which I offer will be thought a cloke for meditated injustice;” “I do not think that the freedom which I offer need be the cause of any misapprehension.” But we are more surprised to find an instance of similar carelessness in Dr. C. Wordsworth, who might have been expected to inherit a special regard for the position of the Greek article. In his *Athens and Attica*, p. 180, we find an extract from Philostratus (*Vita Herodis Soph.* 11): κἀκεῖνα περὶ τῶν Παναθηναίων τούτων ἤκουον, πέπλον μὲν ἀνῆφθαι τῆς νεῶς ἡδὶα γραφῆς σὺν οὐρίῳ τῷ κόλπῳ, which is thus translated: “I have heard this description of the Panathenaic festival: they tell me that a Peplus, more lovely than a picture, was hung from the ship wafted by its swelling bosom.” Now it is clear from the passage that the ship was not *wafted* by the sail, but moved by machinery on the ground (ἐπιγείους μηχαναῖς); consequently, it was necessary to predicate of the Peplus that it was artificially distended, as if filled by a favourable wind; and Dr. Wordsworth’s translation, which substitutes an epithet for the predicate, conveys no such idea. (b) In Longinus *de sublimitate*, § viii. we find that the first and most important of the five sources of sublimity is described as τὸ περὶ τὰς νοήσεις ἀδρεπήβολον, where the correction ἀδρεπίβολον is fully justified by the parallel cases of εὐεπίβολος and μεγαλεπίβολος (see Dindorf *ad Steph. Thes.* iii. 1502). Instead of this Ruhnken has not hesitated to propose an unintelligible solæcism. He says: “Lon-

ginus, ni fallor, scripserat: τὸ περὶ τὰς νοήσεις ἀδράς ἐπήβολον." Those who have objected to this emendation have not remarked that it is opposed to the vital principles of Greek syntax. Conversely, Elmsley, and Burges, from not perceiving the construction, have extruded the article from the following passage of Euripides (*Troad.* 398):

Πάρις δ' ἔγρημε τὰν Διός, γήμας δὲ μὴ
σιγώμενον τὸ κῆδος εἶχεν ἐν δόμοις.

Here Elmsley, following in the steps of Mr. Burges, proposes to read the second line thus:

σιγώμενόν τι κῆδος εἶχεν ἄν δόμοις*.

Mr. Burges says: "nihil hic habet articulus." It seems to us completely at variance with the spirit of the Greek language to omit the article here. For a participle like *σιγώμενον* could not be a mere epithet, when used without the article, though it naturally follows the verb *εἶχεν*, as the expression of a continuous result. With regard to the *ἄν*, which is substituted for *ἐν*, we think, in the first place, that the preposition is required here; and that the *ἄν*, so far from being necessary, would actually weaken the meaning. For as the matter was all past and gone, the only apodosis allowable here would be the aorist with *ἄν*. No one would say of Paris after his death, *εἶχεν ἄν*, "he would have," but *ἔσχεν ἄν*, "he would have had." As it is, Euripides, referring no doubt to the humble connexion between Paris and Cene, makes Cassandra say that "Paris married (aor. i. e. as one act) Jove's daughter; but by not having married her (i. e. if this act had been omitted), he thereby continued to keep his marriage affinity in the obscurity which originally belonged to it." (c) We have removed a gross solœcism from Pindar, *Isthm.* III. 23, by reading *θνατὸν διέρχονται βίτου τέλος* instead of *τὸ βίου τέλος*, in which the editors acquiesce, although the article is omitted in several MSS. And we have similarly expunged the article which Böckh had inserted in *Isthm.* VIII. 39, where he reads, contrary to all syntax,

* Elmsley's note (*ad Med.* 416), is as follows: "*Troad.* 398, Πάρις δ' ἔγρημε τὴν Διός, γήμας δὲ μὴ σιγώμενον τὸ κῆδος (recte Burgesius *σιγώμενόν τι κῆδος*) εἶχ' ἄν ἐν δόμοις. Ita Burgesius, Schäferus, et Matthiæ. Vulgatam εἶχεν ἐν δόμοις retinuit Seidlerus. Certissime reponendum εἶχεν ἄν δόμοις. Noster *Helen.* 765: τοὺς θεοὺς ἔχων τις ἄν φίλους, ἀρίστην μαντικὴν ἔχοι δόμοις." Mr. Burges has favoured us with a communication on the subject of his conjecture. He says, very truly, that the *ἐν* is indispensable, "as is shewn by Burney, or rather Porson, in the *Monthly Rev.* 1789, p. 245," and that to obviate all difficulties, he would now read, *Σιγώμενόν γ' ἄν κῆδος εἶχεν ἐν δόμοις*, for that *ἄν* is absolutely requisite. We have stated above our reason for dispensing with *ἄν*.

θεόμορον ὀπάσσαι τὸ γέρας. In *Æschylus, Choëph.* 489, all the editors, so far as we know, silently accept the reading:

ἄρ' ὀρθὸν αἴρεις φίλτατον τὸ σὸν κέρα;

which is an indefensible solæcism; for it is clear that the tertiary predicate is expressed by ὀρθόν, and that φίλτατον has no place here unless as an epithet to κέρα, which, from the position of the article, it cannot be. We believe that the true reading is φιλέταις, just as we find in the reply of Orestes which follows: ἦτοι δίκην ἵαλλε σύμμαχον φίλοις*. We remark in passing that we should infer from the word ἐτευνάτην in v. 503, that the last ten lines should be equally divided between the two interlocutors, Electra and Orestes, namely, that we should assign to Electra, vv. 493—496, and to Orestes, vv. 497—502: so that he will begin his little speech with οὕτω γάρ, just as in 476. In Sophocles, *Ajax*, 135, the commentators cannot see the necessity of accepting Bothe's emendation,

τῆς ἀμφιρύντου Σαλαμῖνος ἔχων
βάθρον ἀγχίαλον,

for ἀγχίαλον, nor did that somewhat rash critic propose it on account of the position of the article, but merely on account of the distribution of the epithets. That they should thus strain at the gnat and swallow the camel, is a striking proof of the grammatical laxity on which we are now remarking. Again, in Sophocles (*Ajax*, 572):

καὶ τὰμὰ τεύχη μῆτ' ἀγωνάρχαι τινὲς
θήσουσ' Ἀχαιοῖς, μῆθ' ὃ λυμεὼν ἐμοῖς—

all the editors (except Schäfer, who proposes to omit the article) have passed over the solæcism in the last words; and it is even defended by Schneider in his edition of Plato's *Respublica*, Vol. II. p. 319, and by W. Dindorf. We read ὃ λυμεὼν ἐμοί. The word λυμεὼν stands on the same footing with ἀπατεῶν, &c. It is the weakened form of a participle used as a noun; for as we have ἀπατή, ἀπατάω, ἀπατεῶν, for ἀπατάων, we might have λυμή, λυμάω, λυμεῶν for λυμάων. The verb λυμάω does not exist, nor is the lengthened form λυμαίνω used in the

* We have read with much surprise a note on this line by Professor Conington in his edition of the *Choëphoræ* (London, 1857). "There are," he says, "other passages where the adjective, though in the position of a predicate, cannot be taken predicatively (e. g. Soph. *Aj.* 135, 1167; *Phil.* 394), so that we must suppose that metrical necessity occasionally induced the Greek poets to violate a rule, which in general they unquestionably observed." If this principle is once admitted, it will be a mere imposition to talk of accurate scholarship.

active by the best Attic writers; they employ only the deponent *λυμαίνομαι*, which is properly followed by the dative, as we are told by the Scholiast on Aristophanes (*Nub.* 931, *λυμαινόμενον τοῖς μειράκιοις*): *λυμαινόμενον, ἀντὶ τοῦ ἐνυβρίζοντα, οὕτως δὲ αὐτοῖς σύνηδες, οὐχί, τὰ μειράκια λυμαινόμενον, πρὸς ὃ καὶ τὸ χ.* (though Xenophon and others make it govern the accusative also); and even in the later writers, when the active *λυμαίνω* occurs, it is construed with the dative, as in Libanius, *iv.* p. 350: *τὰ λυμήναντα τοῖς πρᾶγμασι*. It is, therefore, by no means unlikely that *λυμεῶν* should be construed with the dative (for such nouns govern the same case as the verbs from which they are derived), and that the ignorant transcriber should not perceive it and write *ἐμός*. A similar solecism has been remedied by a similar correction in Eurip. *Hippol.* 683: *Ζεὺς σ' ὁ γεννήτωρ ἐμὸς προῖδίζον ἐκτρέψειεν*, where the Copenhagen MS. supports the reading *ἐμοί*, and in Theocritus, *xxvii.* 58: *τῶμπέχονον ποίησας ἐμοὶ ῥάκος*, where the common editions have *ἐμόν*; the final *ν, σ, ι* are very like one another in the MSS. If any one objects that *λυμεῶν* is usually found with the genitive (as in Eurip. *Hippolyt.* 1068), there would be no objection to the emphatic *ἐμοῦ* at the end of the line. But the rule is, to prefer the *facilior lectio*, especially when it involves the *difficilior interpretatio*, and the transition from *ἐμός* to *ἐμοί* is easier than that to *ἐμοῦ**. In another passage of the *Hippolytus* (605), *ναὶ πρὸς σε τῆς σῆς δεξιᾶς ἐνωλένων*, we must consider *ἐνωλένων* as the genitive in agreement with *σοῦ* implied in *σῆς*, unless we prefer the reading *τῇσδε δεξιᾶς*, which is found in one of the MSS., but would hardly suit the context; for *τῇσδε* would refer rather to the Nurse than to Hippolytus.

We might bring forward a great many other instances of the ignorance or inadvertence of scholars with regard to this fundamental principle of Greek construction; indeed, the remark which Valckenaer made, when he stated the rule, is still applicable—*credi vix potest quam frequenter in minutis hisce fuerit ab hominibus etiam Græce perdoctis peccatum* (*ad Herod.* i. 180). That English scholars should not have observed this, after the publication of Middleton's elaborate treatise, is still more wonderful; for, although that book is based upon a theory opposed to all sound views of the philosophy of language, it at least stated distinctly enough the rule that the subject is generally found *with* the article and the predicate *without* it (pp. 53 foll. ed. Rose).

* Mr. Shilleto, like Schäfer, proposes the simple expedient of omitting the article before *λυμεῶν* in the one passage and *γεννήτωρ* in the other (*Journal of Philology*, ii. p. 85).

305 The following examples will explain to the young student the influence of the article in determining whether a given adjective or participle is to be considered as an *ὄνομα* or as a *ῥῆμα*. *Ὁ βασιλεύων* is a synonym for *ὁ βασιλεύς*, but *βασιλεύων* means "during his reign," "when or if he is reigning:" for example, *Κῦρος ὁ βασιλεύων* is "Cyrus the king," but *βασιλεύων ὁ Κῦρος*, "Cyrus, when he was king." *Ὁ λευκὸς ἵππος* means "the white horse," but *λευκὸς ὁ ἵππος*, "the horse is white." *Ὁ φρονῶν* is "the wise or prudent man," but, Sophocl. *Æd. Tyr.* 316,

φεῦ, φεῦ· φρονεῖν ὥς δεινὸν ἔνθα μὴ τέλη
 λύει φρονοῦντι,

means "what a sad thing it is to be wise, in cases where it is unprofitable (does not *pay*) to be wise," so that the participle is equivalent to the infinitive; comp. *Æd. Tyr.* 863: *εἴ μοι ξυνείη φέροντι μοῖρα τὰν εὐσεπτον ἀγνείαν λόγων, ἔργου τε πάντος*, and Lysias (*de eversa republica*, p. 174, l. 14): *οὐκ ἄξιον πολλάκις χρῆσθαι συμβούλοις οἷς οὐδὲ ἄπαξ ἐλυσιτέλησε πειθόμενοις*. *Ἡ βέβαιος χάρις* would mean "the lasting obligation," but the Coreyceans say "it is their business to show that their gratitude will be lasting,"—*ὥς καὶ τὴν χάριν βέβαιον ἔξουσιν* (Thucyd. i. 32), and thus they tell the Athenians (in the following chapter): "that by receiving as allies people whose dearest interests were at stake, they would confer the favour with as indelible a record as possible," *ὥς ἂν μάλιστα μετ' ἀειμνήστου μαρτυροῖον τὴν χάριν καταθεῖσθε*. The following passage contains a good exemplification of the uses of the participle, both as *ὄνομα* and *ῥῆμα*; Thucydides, i. 36: *καὶ ὅτω τάδε ξυμφέροντα μὲν δοκεῖ λέγεσθαι, φοβεῖται δὲ μὴ δι' αὐτὰ πειθόμενος τὰς σπονδὰς λύσῃ, γνώτω τὸ μὲν δεδιὸς αὐτοῦ, ἰσχὺν ἔχον, τοὺς ἐναντίους μᾶλλον φοβῆσον, τὸ δὲ θαρσοῦν μὴ δεξαμένον, ἀσθενὲς δὲν πρὸς ἰσχύοντας τοὺς ἐχθρούς, ἀδέεστερον ἐσόμενον*. Here it is obvious, that *ξυμφέροντα*, *πειθόμενος*, *ἔχον*, *φοβῆσον*, *δεξαμένον*, *ὄν*, *ἰσχύοντας*, and *ἐσόμενον*, are all predicates, the two futures being equivalent to infinitive moods of the same tense, while *τὸ δεδιὸς* and *τὸ θαρσοῦν* are subjects, or equivalent to nouns substantive: the meaning is: "and if any one thinks that what has been said is for his interest, but is afraid, lest, if he listens to our arguments, he may be induced to break the treaty, let him know that his fear, if it brings him strength, will rather be alarming to his enemies, whereas his confidence, after having refused our aid, will be less formidable, because it will be weak as compared with his enemies, who will be strong." Again, *οἱ ἀφεστηκότες ξύμμαχοι* would mean "the revolted allies;" *οἱ ἀφεστηκότες τῶν ξυμμάχων*, "those of the allies who had revolted;" but Thucydides, ii. 65: *ἀντειχον τῶν ξυμμάχων ἔτι τοῖς πλείοσιν ἀφεστηκόσι* means "in addition to all their other

enemies they kept their ground against the majority of their allies, they having revolted," or "for they had revolted," or "after they had revolted;" not "who had revolted," as some people would translate it (cf. Thucyd. i. 18, § 7). Aristoph. *Equites*. 280:

ναὶ μὰ Δία κ᾽ἔγωγε τοῦτον, ὅτι κενῇ τῇ κοιλίᾳ
ἔσδραμὼν ἐς τὸ πρυτανεῖον, εἵτα πάλιν ἐκθεῖ πλέα.

"I'll inform against this fellow, for going into the town-hall with his belly empty, and coming out again with it full;" i. e. his belly was empty when he went in, but full when he came out again. In Sophocl. *Antig.* 360,

ἄπορος ἐπ' οὐδὲν ἔρχεται
τὸ μέλλον,

the Scholiast and Hermann suppose that ἐπ' οὐδὲν τὸ μέλλον ought to be taken together, with the sense ἐπ' οὐδὲν τῶν μελλόντων; but it appears to us that τὸ μέλλον is in apposition to the whole of the preceding line, "in regard to the future, he comes to nothing unprovided with resources." At the beginning of the following strophe, the article is properly explained by Wex. In another part of the same play, the chorus, after stating that, when misfortune once begin in a family, they go on till the race is extinct, exclaim (v. 594):

ἀρχαῖα τὰ Λαβδακιδᾶν οἴκων ὀρῶμαι
πήματα φθιμένων ἐπὶ πήμασι πίπτοντ',
οὐδ' ἀπαλλάσσει
γενεὰν γένος—

which signifies, "the calamities of the house of Labdacus, which I behold in the act of being added to the calamities of those members of the family who are dead and gone, are only the old misfortunes resuscitated and revived."

306 These instances will be sufficient to show the natural connexion of the article with the subject of the proposition. From these cases, the student will be careful to distinguish those in which the proposition is convertible or reciprocating, such, namely, "that of either term taken as the subject, the other may be affirmed as a predicate" (Middleton, p. 54). In these last cases, which are, of course, not very numerous, the article either appears before both subject and predicate, as in Plato, *Theætet.* p. 145 E: ἔρ' οὐ τὸ μανθάνειν ἐστὶ τὸ σοφώτερον γίγνεσθαι περὶ δὲ μανθάνεις; (cf. Heindorf *ad Gorg.* § 102, p. 491 E*) or

* The instance given by Middleton from Aristot. *Eth.* ii. 9, ἐστὶν ἡ ἀρετὴ ἡ ἡθικὴ μεσότης, is erroneous; ἡ ἡθικὴ is the epithet to ἡ ἀρετὴ, and μεσότης alone is the predicate.

is omitted in both, as in the aphorism of Protagoras: πάντων χρημάτων μέτρον ἀνθρώπου. With the latter, we must compare such cases of tertiary predication, as λεγόμενον ἐρέω (Pind. *Pyth.* v. 101), which may be rendered indifferently "every body will say what I say;" and, "I will say what every body says." Matthiæ (*Gr. Gr.* § 264, obs.) quotes some instances, in which he says the predicate has the article, but the subject wants it. In all these the predicate, as he calls it, is the subject, nor can we conceive the possibility of such a conversion as he supposes. On the omission of the article with the subject and its appearance with the predicate, see the *Greek Grammar*, articles 392 sqq.; and for full illustrations of the different kinds of predicates, see articles 417—498.

CHAPTER VI.

COMPOUND WORDS.

307 Analogy between the Greek and Sanscrit compounds. 308 Orthographic affections of contiguous words in these languages approximate to compounds. 309 The six classes of Sanscrit compounds compared with the Greek. 310 Parathetic and synthetic compounds in Greek. 311 Parathetic compounds occasionally overlooked. Case of *χρόνω-κλυτός* and *λόγω-παλαιός*. 312 Synthetic compounds. Their euphonical affections. 313 Accentuation of those which terminate with a verbal. 314 Compounds commencing with a verbal. 315 The signification and construction of compound words has sometimes very little reference to their constituent parts. 316 The compounds *διδύραμβος*, *καλοκάγαθος*, and *ἐντελέχεια*, important terms in literature, politics, and philosophy. 317 (1) *Διδύραμβος*. The termination connected with *ἱαμβος*. 318 The middle syllable contains the root of *θύρ-σος*. Explanation of this symbol. 319 The first syllable is the dative of *Ζεύς*. 320 More recent opinions respecting the *θύρσος*. 321 (2) *Καλοκάγαθος*. General meaning of the compound. 322 *Ἀγαθός* refers to nobility of birth. 323 Derivation of *ἀγαθός*. 324 *Καλός* expresses educational accomplishment. 325 Qualities attributed to the aristocracy; 326 Connected with their social position, as opposed to that of the populace. 327 Moral excellence denoted by *καλοκάγαθος*. 328 Also by the Latin *gentilis*. 329 The word *ἥρως* as a title of rank. 330 Connexion of this term with *κύριος*, *κόρος*, *κονρίδιος*, &c. 331 Digression respecting *κύρηβος* and *κυρήβια*. 332 *Ἄρης* and *vir*. 333 *Ἀνῆρ* = *Φα-νῆρ* and *Nero*. 334 *Ἀναξ* = *Φάναξ* connected with *ἀνά*. 335 *Υβρις* similarly connected with *ὑπέρ*. Contacts between this word and *κόρος*. 336 Further analogies between *κόρος*, *ἄδρος*, *χλιδή*, *δργή*, &c. 337 *Κῶνις* and "king" not immediately connected with *Φάναξ*. 338 "Lord" refers to elevation. 339 (3) *Ἐντελέχεια*. Difficulties occasioned by a confusion between this Aristotelian term and the older word *ἐνδελέχεια*. 340 Opposition between *δύναμις* and *ἐντελέχεια*. 341 *Δύναμις* also opposed to *ἐνέργεια*. 342 Distinction between *ἐντελέχεια* and *ἐνέργεια*. 343 Aristotle uses *ἐντελέχεια* to signify the absolute definition of a thing. 344 Signification and etymology of *ἐνδελεχής*.

307 ONE of the most striking peculiarities, and indeed one of the greatest beauties, of classical Greek, is the frequent and varied use of compound words by the best authors. Our own language cannot make the most distant approximation to the Greek in this, the German falls far short of it, the Latin still more so. There is, however, one language of our family, the Sanscrit, which bears a strong analogy to, and even excels, the Greek in this respect; it will be proper, therefore, before we engage in an inquiry about the principles which regulate the formation of compound words in Greek, to consider the laws according to which this process is carried on in the old language of India.

308 A person not well skilled in Sanscrit always experiences great difficulty in distinguishing the words in a line of poetry from one another: the whole line will appear to him to be formed into one mass, the end of every word being altered, on euphonical principles, to suit the commencement of the word which follows; in fact, as Colebrooke has remarked (*Asiatic Researches*, VIII. p. 201), it is an euphonical orthography, which consists in extending to syntax the rules for the permutation of letters in etymology. The same is observed to a certain extent in old Greek inscriptions (Böckh, *Corpus Inscript.* I. p. 126). The feeling which gave rise to this orthographical anomaly, and certainly to the formation of the long compounds also (see the instances in the *Gr. Gr. Art.* 365), may be traced in the peculiarities of Greek syntax; for instance, that construction which we call attraction is the simple effect of a striving after brachylogy, of the attempt to compress the meaning of a sentence into a closely-connected group of words. The only distinction, between a real compound and syntactical phenomena like this, is that in the compound the separate words have so entirely coalesced that the inflexion of the last word alone is regarded.

309 The Sanscrit grammarians have discriminated six kinds of compound words or *samāsa*. They give the following names to the different species (see Wilkins' *Grammar*, pp. 556 foll.): (1) *avyayībhāva*, (2) *tatpurusha*, (3) *dvandva*, (4) *dvigu*, (5) *bahuvrīhi*, (6) *karmmadhāraya*. We shall consider these one after the other.

1st class. A compound of this kind is indeclinable. The first member is some preposition or particle, and the last is a noun terminating in the sign of the neuter gender; for instance, *nirmakshikaṇ*, "without flies," from *nir*, "without," and *makshika-s*, "a fly." Similar compounds in Greek are *ἐμποδών*, &c. Sometimes, however, the substantive appears in the instrumental or locative case, like *ἔνεκεν*; thus we may write either *upa-kumbhaṇ*, or *upa-kumbhena kṛtan*, "done by the jar," and either *upa-kumbhaṇ*, or *upa-kumbhê nidhê-hi*, "place it in the jar." This looks very like the government of a case by a preposition, which the Sanscrit grammarians repudiate, but of which we have found other similar instances: thus in the *Rāmāyana* (Lib. II. 66, ślōka 29, ed. Gorresio) we find *nanu tē aham prānēbhyō 'pi priyā*, "am I not dear above your life?" *priyā api* (ἐπι) *prānēbhyas*, for *priyatarā prānēbhyas*, is like *vitā super cara* for *vitā carior*. Sometimes we have a *bahuvrīhi*, or declinable adjective, where we should expect the *avyayībhāva* or adverbial compound: thus, close by the passage just quoted we have, in two following ślōkas, *sabhāryas*, "with my wife," in the nominative case, and *tam aham sparṣayā-*

mâsa sa-bhâryam (accus. agreeing with *tam*) *patitam* (περόντα) *sutam*, "I made him, together with his wife, touch his fallen son."

2nd class, or *tatpurusha*. These compounds are formed of two or more nouns, the first set being in some oblique case, governed by the last, which may be a substantive, an adjective, or a participle in *-ta*: the following are instances, *râja-purusha*, "a king's man," *hasty-asva-ratha-ghêsha*, "the noise of elephants, horses, and chariots," *svarga-patita*, "fallen from heaven." These correspond, of course, to the Greek compounds ἐγγεσί-μωρος, θεοσ-εχθρία, παρθενο-πίπτης, σιδη-ρο-μήτωρ, &c. The construct state of the Hebrew noun represents the *tatpurusha* compound in the inverse order of arrangement, cf. נָתַן עִמָּךְ with *râja-purusha*.

3rd class, or *dvandva*. This class forms substitutes for collections of nouns in the same case and joined together by a copulative conjunction. The last noun alone is declined, and is (1) in the dual or plural number according as two or more nouns are joined together; or (2) it is a neuter singular, showing that the aggregate is considered as one: thus (1) *guru-çishyâu*, "master and scholar" (dual); *brâhmaṇa-kshatriya-vit'-çâdrâs*, the names of the four Indian castes (plur.): (2) *chhatrô-pânaham* (*chhatra*, *upânaha*), "parasol and shoe" (neut. sing.). The Greeks do not distinguish the dual, but *dvandva* compounds are not uncommon in Aristophanes; see, for instance, the long word with a collective ending in the *Ecclesiazusæ* (1169 foll.), and proper names like *Τισαμενο-Φάλιπποι* (*Acharn.* 603).

4th class, or *dvigu*. Collectives, of which the first part is a numeral, belong to this class; the noun is either feminine in *î*, or neuter in *â*: thus *tri-râtra*, "three nights," *tri-lokî*, "three worlds." The Greeks have no *dvigu* compounds, unless we can consider adjectives like δίδραχμον, χιλιονούτης, &c., as belonging to the class.

5th class, or *bahuvrîhi*. In this class are contained compound adjectives; the last part is a substantive, the first is any other part of speech. The following are instances: *bahu-dhanas*, *-â*, *-an*, "rich," from *bahu*, "much," and *dhana*, "wealth;" *bahu-padas*, "having many feet;" *bahu-mântaṅgaṇ vanaṇ*, "a forest with many elephants." These compounds are very common in Greek, as πολύπους, φιλόκαλος, &c.

6th class, or *karmmadhârya*. This class forms compounds, of which the last part is a substantive or adjective, modified in meaning by some preceding adjective in an uninflected state. Thus, *mahârâjas*, "a great king;" *param-âha*, "a fine day;" *su-mahat* (εὖ μέγας) "very great." The interrogative *kiṇ* is also used in this sort of com-

pound as an expression of contempt: as *κινῖτρα*, "what a hero!" The *karmmadhārya* compounds in Greek are mostly proper names, as *Ἱεροσόλυμα*, *Μεγαλόπολις*: in the poets, however, we often find them as common epithets; but the adjective does not always precede; thus we have *ὀρθόμαντις* for *ὀρθὸς μάντις*, *τυμβόχωστος* for *τύμβος χωστός*, *ἀρισθάρματος* for *ἄριστον ἄρμα*, *ἀνδροφθόρος* for *ἀνὴρ φθαρεῖς*, &c. One of these compounds, which is *ἅπαξ λεγόμενον*, ought to be banished from the lexicons. For we entertain no doubt that the line (*Æsch. Agam.* 1143), *ἐγὼ δὲ θερμόνους τάχ' ἐν πέδῳ βαλῶ*, exhibits merely a confusion of the true readings, *ἐγὼ δὲ θερμὰς σταγόνας ἐν πεδῷ βαλῶ*. Cf. *Agam.* 1249: *θερμῶ κοπίσης φονίῳ προσφάγματι*. *Choëph.* 394: *φονίας σταγόνας χυμένας ἐς πέδον*.

310 Greek grammarians distinguish between two sorts of combinations: the one synthetic or organic—*κατὰ σύνθεσιν*; the other parathetic or unorganic—*κατὰ παράθεσιν* (*Apollon. Dyscol. Syntax.* p. 310 Bekk.). The former is when words are so combined that the first of them loses all inflexion, and the last word is the pivot of the meaning: the latter is when both words retain their inflexion, but are joined together so intimately and habitually that they may be written as one word. The parathetic compound is a natural prelude to synthetic combination, and we sometimes find words oscillating between the two sorts of composition. Regular parathetic compounds are often found in proper names, as *Κυνόσσημα*; in particles, as *οὐκέτι*, *τοπρῶτον*; or in epithets, as *ναυσι-κλυτός*, *γαστρί-μαργος*, *νεώσ-οικοι*; or we find that, although the two words are not absolutely melted down into one, the former has suffered some modification in its vowels on account of the weight of the word, so that neither part could stand alone: such words are *σακεσ-πάλος*, *μελεσί-πτερος*, *τελεσ-φόρος*, *ὀδοι-πόρος*, and a number of words compounded with *θεος-* for *θεοῖς* (*Pott, Etymol. Forsch.* i. p. xxxviii; *Rosen, Journal of Education*, ix. p. 334), such as *θεος-εχθρία*, *θεός-δοτος*, *θεος-κυνῆ*, *θές-κελος* (*θεοῖς ἕκελος*), *θές-πις*, *θεσ-πέσιος*, *θεσ-πι-έπεια* (in which the root *φεπ-* occurs twice; so that the word means "saying again what was said to her by the gods"), *θεσ-πρωτός* (*θεοῖς πεπρωμένος*), *θεός-συτος* (*ἐκ θεοῦ ὀρμηθεῖσα*, *Schol. ad Æschyl. Prom.* 116), *θές-φατος*, *θεσ-πιαί*, *θίς-βη*, &c. In *ἀργει-φόντης*, *ἀνδρει-φόντης*, the possessive adjectives *Ἀργεῖος*, *ἄνδρεῖος* partly explain the genitive presumed in the original parathesis. In *ἐνεκα*, *φροῦδος*, &c. the breathing only of the first part is affected: in *βός-πορος*, *ῥός-πορος*, *λυκός-ουρα*, we have abbreviated forms of the old genitive. A verb combined with a preposition is not only a parathetic, but also a separable compound: at least in the older state of Hellenism they could always be parted by tmesis; when, however,

a verb combined with the preposition assumes a secondary derivative form, the compound becomes synthetic, and such words as *σύννοικος*, *ἐπίκουρος*, *σύνδουλος*, &c. are one and indivisible, as indeed appears from the way in which the accent is thrown back (*Apollon. ubi supra*).

311 We must take this opportunity of pointing out two passages which have been erroneously interpreted, in consequence of a misunderstanding of a juxtaposition, virtually amounting to a parathetic compound, which occurs in both. The passages are, Pindar, *Pyth.* xi. 32:

θάναεν μὲν αὐτὸς ἦρωες Ἀτρεΐδας
ἱκὼν χρόνῳ-κλυταῖς ἐν Ἀμύκλαις.

and Æschylus, *Choëph.* 641:

τέκνον δ' ἐπεισφέρει δόμοισι,
δωμάτων παλαιτέρων
τίνειν μύσος,
χρόνῳ-κλυτῇ βυσσόφρων Ἐρινύς.

In both of these passages the commentators take *χρόνῳ* by itself, as signifying "after a long absence," "at last." Pindar, however, would hardly have used *χρόνῳ* in this sense, as he says immediately afterwards *χρονίῳ σὺν Ἀρει* (v. 36), and this meaning in the line of Æschylus would leave no tolerable sense for *κλυτή*. But *κλυτός* is constantly used in parathetic compounds, as *ναυσικλυτός*, *δουρικλυτός*, &c., implying merely eminence in that which is expressed in the dative case preceding. Now the particular always considered as most remarkable in Amyclæ is its extreme antiquity, and the Erinyes are especially in this very trilogy of Æschylus distinguished from the other deities by their greater age (see *Eumen.* 701, 748, 810, and comp. *παλαιόφρων*, *Eumen.* 833, with *βυσσόφρων* in this passage: also Müller, p. 181). Therefore, *χρονοκλυτός*, as it might be written, signifies only "time-honoured" or "ancient" in both places. The same is the case with the collocation *λόγῳ-παλαιός* in the two following passages; Æschyl. *Agam.* 1198:

ἐμμερτέρησον προὔμοσας τό μ' εἰδέναι
λόγῳ-παλαιᾶς τάσδ' ἁμαρτίας δόμων.

i. e. "that I know the sins of this house, although they are old in story." Soph. *Œd. Tyr.* 1395:

ὦ Πόλυβε καὶ Κόρινθε, καὶ τὰ πάτρια
λόγῳ-παλαιὰ δώματα.

i. e. "O Polybus and Corinth, and ye paternal, in-word-original mansions"—which were formerly called my home. The construction of

παλαιός with λόγῳ in both these passages, and the similar use of χρόνῳ in the two former instances of quasi-parathesis, is confirmed by a passage in Sophocles, where the dative of the one collocation is combined with the adjective of the other; *Æed. Col.* 112:

σίγα, πορεύονται γὰρ οἷδε δὴ τινες
χρόνῳ-παλαιοί, σῆς ἔδρας ἐπίσκοποι*.

312 In treating of the synthetic compounds we will first take those which have the verb-element in the last place, and then those which begin with the verb. When two nouns are joined together we find them connected by the short vowel ο, which is elided when the second word begins with a vowel: where the first word ends in ι or υ these vowels generally keep their place before consonants: the same remark applies to αυ and ου, and, in certain cases, to the liquids ν and ρ. When the first noun has two pronominal elements affixed to the root the latter is frequently dropt. This is particularly the case with nouns ending in -μα-τ-; thus we have αἰ-μο-σταγής for αἰ-μα-το-σταγής, στο-μ-αλγία for στομα-τ-αλγία, &c. The ν of the comparative may be omitted even when the second part of the compound begins with a consonant, as in *Æsch. Sept. c. Theb.* 783: τῶν κρείσσοτέκνων ἀπ' ὀμμάτων ἐπλάγχθη, where we ought to read κρείσσοτεχνῶν (cf. *Pind. Fr.* 29: ἀριστοτέχνα πατέρ). And in the strophe we should read μὴ τέλη τάσδε καμψίπους' Ἐρινύς. We have similarly Ἑλπινίκη for Ἑλπιδονίκη. After the compound word had become so well established in use, that its individuality was alone considered, and its separate parts forgotten, the fineness of the Greek ear induced certain euphonical changes made with a view to blending the elements into one mass. This generally took place at the point of junction, but, according to the principle before laid down with regard to the change of place in the aspirate, this euphonical change was shifted to different syllables according to the length and general weight of the word. One of the common changes was that repetition of a liquid, of which we have before spoken: this was always the case with the ρ, as in περὶ ῥόοος, ἰσό ῥόοπος, &c.; it also occurred very frequently with the other liquids, as in ἀπολλήγειν, Ἴππομέδων, Παρθεννοπαῖος, Ἀλφεσσίβοια. In a compound like Ἴππόδαμος euphony might require a lengthening of one of the last three short syllables, and as this could not take place at the junction, where there was no liquid, it is passed on to the liquid μ in the next syllable, and thus we find Ἴππόδαμος (see above, § 220).

* The second passage, which was first adduced in our *Greek Grammar*, Art. 378 (ed. i.; 367 ed. ii.) shows that Mr. Paley was rather hasty in questioning the interpretation of λόγῳ-παλαιός in the *Agamemnon*; see also *Journal of Philology*, III. p. 210.

This euphonic lengthening, however, most frequently happens in the first syllable of the second part of the word, where we often find an α or ϵ changed to η , and o to ω , as in the following instances: $\epsilonὐήνεμος$ ($\acute{\alpha}\nuεμος$), $\deltaυσήρετος$ ($\xi\rhoετος$), $\sigmaυνώνυμος$ ($\acute{\omicron}\nuομα$), &c. In some compounds it is a matter of indifference whether we lengthen this joining syllable or some other: thus we may say indifferently $\ἀνήρῃδμος$ or $\ἀνἀρῃδμος$. A case of the same kind is the lengthening of the first vowel of a compound or derivative word, as $\acute{\eta}\nuορέη$ ($\acute{\alpha}\nuήρ$), $\acute{\omega}\lambdaεβίοικος$, &c., and to this case also the last-mentioned variation applies; thus we have both $\acute{\eta}\lambdaυσις$ and $\acute{\epsilon}\lambdaευσις$ (Buttmann, *Ausführl. Sprl.* §. 120, *Anm.* 1). These vowel-changes fall under the head of *guna*; before β and π however we often find *anusvāra*, as in $\tauύ-μ-πανον$, $\piεισί-μ-βροτος$, $\acute{\omicron}-μ-βριμος$, &c. When the second part of the compound does not begin with either a liquid or a vowel, we find the final vowel of the first part, which should properly be a short o , the medium weight of $\acute{\alpha}$, converted into η or $\bar{\alpha}$, and that too, not only in the case of nouns of the first declension as $\chiοηφόρος$, $\acute{\alpha}\gammaορᾶνομος$, but also in nouns of the second and third declensions, as $\acute{\epsilon}\lambdaαφηβόλος$, $\thetaανατηφόρος$, $\piολιᾶ-νόμος$, which seem to refer to obsolete forms of the included noun (compare verb-forms like $\thetaανατάω$).

313 When we say that some synthetic compounds begin or end with a verb, we must be understood as meaning, that they contain the root of a verb, or rather the crude-form of a verbal substantive. It cannot be too strongly impressed upon the student's mind, that verbs are never directly compounded with any thing but prepositions, in which case they are separable compounds. All apparently compound verbs are derivatives from compound substantives, of which the last part is a verbal root. Thus, from $\betaάλ-λειν$ is formed the verbal $\betaολή$, from $\lambdaίθον$ $\βάλλειν$ the juxtaposition or parathesis $\lambdaίθου βολή$, from this the compound verbal $\lambdaιθοβόλο-ς$, and from this again the derivative verb $\lambdaιθοβολέ-ω$. According to the accentuation, such a word as $\lambdaιθοβόλος$ might mean either "a person who pelts" or "a person who is pelted" with stones; that is, according as the accent is on the verbal element or not. Thus, $\muητροκτόνος$ would apply to Orestes who killed his mother, but $\muητροκτονοι$ to the children of Medea who were slain by their mother. This rule of distinctive accentuation is not observed in words compounded with prepositions and adverbs or with the adjectives $\piᾶς$ and $\πολύς$, which are always proparoxytone: for instance, we find $\deltaμόσπορος$ proparoxytone when applied to Jocasta as the wife both of $\text{\textcircled{E}}dipus$ and $\text{\textcircled{L}}aius$ (*\textcircled{E}d. Tyr.* 260), and to $\text{\textcircled{E}}dipus$ himself, as the husband of the same wife with his father (460): in both cases as a synonym of $\deltaμόγαμος$ (*Eurip. Herc.*

F. 339), and of *δμογενής* (*Æd. Tyr.* 1361); and we have the same accentuation when the word signifies "a brother" or "sister," as in *Trachin.* 212: *βοᾶτε τὴν δμόσπορον Ἀρτεμιν Ὀρτυρίαν*. But besides this exception depending on the nature of the first part of the compound, instances are numerous in which compounds terminating with verbals, and having only one, and that an active signification, are nevertheless consistently proparoxytone: such words are (1) the epic compounds *ἱππόδαμος*, *ἐγγέσπαλος*, *σακέσπαλος* and *πολίπορθος*; (2) compounds with *ἔρχω* and *συλλάω*, as *ἵππαρχος*, *ιερόσυλος*; (3) compounds with *ἔχω*, as *ἡνίοχος*, *δαδοῦχος*. It is to be remarked that words compounded with *ἐργο-* are oxytone when they signify a bodily action, thus, we have *λιθουργός*, *γεωργός*, &c.; but proparoxytone, or by contraction properispome, when they denote merely an operation or habit of the mind, and thus we have *πανοῦργος*, *παντοῦργος*, &c. Exceptions to this rule are found in *ῥαδιουργός*, *λιτουργός*, *λεωργός*, which last is a synonym of *λιτουργός*, and derived from *λεώς*, not from *λέως*, as Hermann suggests (*ad Soph. Antig.* 1261).

314 When the first part of the compound is a verb-root, it generally appears under the form of a verbal in *-σι-*, as in *ἐγεσσίχορος*, *λυσίπονος*, or the vowel is elided, as in *ρίψασπις*, *πλήξιππος*, *φνξάνωρ*. Very frequently, however, the shorter verbal form in *η* is preferred, the crude-form of which ends in *ε*: as in *ἀρχέ-κακος*, *δακέ-θυμος*, &c.; or with elision, as in *φέρασπις*, where we have the lighter vowel *ε* instead of the *ο*, which we find in the lighter form *φορά*. Sometimes the connecting vowel is *ο* or *ι*, as in *φνγό-μαχος*, *ἀρχι-θέωρος*. The compounds like *λειπο-ταξία*, *φαινο-μηρίς*, in which the strengthened form of the present tense is preserved, seem to owe this peculiarity to a speciality elsewhere observable in these two roots. Thus we have *λειποστράτιον*, *λειποψυχεῖν*, *λειπογνώμων*, &c., though Cobet (*Hyperid.* p. 57) would write *λπ-* on the authority of Callimachus (*ap. Schol. Aristoph. Av.* 873) and the verbals in *-σις* from this root (*ἔκλειψις*, *ἔλλειψις*, &c.) belong to the class which always retains the diphthong (cf. *ἄμειψις*, *δεῖξις*, *ξεῦξις*, &c. And we have the strengthened root of *φαίνω* in *Φαῖνοψ*, *φαινοπροσώπῳ*, *Φαῖνιππος*, *Φαινιππίδης*, *Φαινοκλῆς*, *Φαινόκριτος*, &c. Forms like *ταμεσί-χρος*, *φερές-βιος*, *ἑλκεσί-πεπλος*, *ταλασί-φρων*, *λιπες-ήνωρ*, *Δαμάς-ιππος*, *Ἀρησί-λαος*, &c., present the verbal in rather an unusual form, but there is no necessity on this account to have recourse to the theory of Rosen (*Adnot. ad Rig-Ved.* p. xxii), that the *σ* represents the *τ* of a participial crude-form, and that the *ι* is an euphonic insertion before consonants.

315 Sometimes a compound is considered as conveying only a simple notion, and the separate meaning of its constituent parts is

consequently disregarded. Thus, in Sanscrit, *gô-sht'ha* is literally "a cow-stall;" but from constant use, it came to signify any stable for cattle; hence we have *açva-gô-sht'ha*, "a horse-cow-stall," and even *gô-gô-sht'ha*, "a cow-cow-stall." This, of course, is more common, when the compound belongs in part to an obsolete dialect; thus we have *loup-garou*=*lupus garulphus*, where the second word is equivalent to *wehr-wolf* (above, p. 193); and *nag-poor*=*nagara-pura*, where both words signify "a city" or "town." So too *cor-morant* is compounded of the Latin *corvus* and the Bas-Breton *mor-vran*, "sea-robber." The same redundancy is observable in phrases also, and sometimes appears rather ludicrous, as in the French *aller à cheval sur un âne*. These instances and others have been collected by Pott (*Zählmethode*, p. 127, note). We have examples of this in Greek also. Thus Aristophanes uses the phrase *τριανοῦν τῇ δικέλλῃ τὸ χωρίον* (*Pax*, 571), although the *τρίαίνα* and the *δίκελλα* were undoubtedly not identical implements. And compounds are occasionally significant only in reference to the epithet which they involve; thus *παλαίφατος* and *ἀρείφατος* are used in the same sense as *παλαιός* and *ἄρειος* alone (Hermann *ad Soph. Aj.* 221). It has been supposed that *ὀρθόπους*, as an epithet of *πάρως* (*Soph. Antig.* 985), conveys merely the meaning of *ὀρθός* (*Matth. Gr. Gr.* § 446, 10, obs. 3 a); but the use of the phrase *ὀρθὸς πούς* to denote the foot outstretched with unbent knee, e. g. as when Minerva is represented in the attitude of hurling a spear (*Æsch. Eumen.* 284, and Müller, p. 112), or when a bull resists an effort to drag it on board a vessel (*Eurip. Hel.* 1555), shows that both parts of the compound are significant in this case. Compound verbs are often placed on a parallel footing with complete phrases, as in *Æsch. Sept. c. Theb.* 261, where we ought to read *μήλοισιν αἱμάσσοντας ἐστίας θεῶν ταυροκτονοῦντάς θ', οἷσιν ᾧδ' ἐπενύχομαι*, instead of *ταυροκτονοῦντας θεοῖσιν* and Plato (*cf. Sophist.* p. 365 E; *Politicus*, p. 302 E) uses indifferently the uncompounded *τέμνειν δίχα*, and the compound verb *διχοτομεῖω*. When the force of a compound verb is reduced to a simple notion, which does not definitely express the meaning of its constituent parts, we find the construction altered accordingly. Thus *ἐκστῆναι*, "to stand out of," should govern the genitive case; but when it signifies simply "to avoid," it is followed by the accusative, as in Sophocles, *Ajax*, 82: *φρονοῦντα γάρ νιν οὐκ ἂν ἐξέστην ὄκνω* (see the parallel passages quoted by Lobeck). Sometimes the compound word is used absolutely, and without any case after it, to express some simple notion. This is the usage of the aorist *ἀνέγνω* in Homer, as in *Il.* XIII. 734, it is said of the man endued with wisdom: *καί τε πόλεις ἐσάωσε, μάλιστα δὲ καὶ τὸς ἀνέγνω*, "he saves cities, but, what is the chief matter, he has knowledge himself."

The common reading, *δή καὶ αὐτός* is manifestly wrong. Similarly, the compound verb *ἀφαιροῦμαι* bears the sense of "prevent, hinder, put a stop to," without any immediate reference to the literal signification of its component parts; generally with the infinitive; Pindar, *Isihm.* i. 62: *πάντα δ' ἐξείπειν—ἀφαιρεῖται βραχὺ μέτρον ἔχων ὕμνος*. Sometimes with *μή* also: Eurip. *Troad.* 1145: *το δεσπότου τάχος ἀφείλετ' αὐτὴν παῖδα μὴ δοῦναι τάφῳ* (see Heindorf, *Plat. Protag.* p. 260 A). Hence it is used absolutely, without any accusative or infinitive, to signify mere hinderance or prevention, as in Æschyl. *Pers.* 428: *ἕως κελαινῆς νυκτὸς ὅμῃ ἀφείλετο*, "until the darkness of night interposed a hinderance." So also Xen. *Hell.* i. 2, § 16: *μέχρι σκοτός ἀφείλετο*. This is imitated with an explanatory addition by Thucyd. iv. 134, § 2: *ἀγχωμάλου τῆς μάχης γενομένης καὶ ἀφελομένης νυκτὸς τὸ ἔργον*. Arrian, *Anab.* ii. 11, § 5: *ἡ νύξ οὐ διὰ μακροῦ ἐπεγενομένη ἀφείλετο αὐτὸν το πρὸς Ἀλεξάνδρου ἀλῶναι*. Josephus, *Antiq.* i. 16, p. 47 Bekker: *τοῦ προσωτέρω χωρεῖν τῆς νυκτὸς αὐτὸν ἀφαιρουμένης*. Similarly in Demosth. *adv. Steph.* i. p. 1128, 1: *τὸν ἀφηρημένον* is used absolutely with something like *ἐμὲ τὸ λαβεῖν δίκην παρὰ τούτου* to be supplied.

316 On the terminations of compound words, we must refer the reader to Lobeck's *Parerga* (*ad Phrynich.* pp. 487 foll.), as we do not mean to add anything to what we have said on terminations in general. It will be better in this place to discuss, with some minuteness, three compound words, which have given much trouble to philologists, and which are respectively of great interest in the literary, political, and philosophical history of Greece: these three words are *διθύραμβος*, *καλοκάγαθος* (along with which we shall consider the other Greek words of a cognate meaning), and *ἐντελέχεια*.

317 (1) *Διθύραμβος*. We have before expressed our opinion with regard to this much-disputed word, but as we were then obliged to confine our remarks to the limits of a note, we may be permitted to repeat them here, in a more expanded and systematic form.

In analyzing a word which we do not understand, but which belongs to a language, the etymological principles whereof are reducible to order and system, the first step naturally is to discover what is the termination of its crude-form, if it has any constant pronominal affix between the root and the case-ending; if not, whether there is any compound word, the last part of which corresponds to the word in question. Now, although the ending of *διθύρα-αμβος* does not coincide with any of the pronominal suffixes which we have mentioned above, there are two words which are strikingly analogous to it in termina-

tion, namely, ἱαμβος and θροί-αμβος. It is incumbent on us, then, in the first place, to inquire what is the force of the termination -αμβος. Nothing is more common in Greek than the appearance of μ before labial-endings. It seems to be a sort of *anusvāra* insertion, which is peculiarly agreeable to the Hellenic ear. The following instances will make the fact sufficiently evident. We have θά-μ-βος as well as θαῦ-μα (θαῖμα), τέ-θηπα; θρό-μ-βος as well as τρέφ-ω; κόρυ-μ-βος as well as κορυ-φή; κό-μ-πος (e. g. ὀδόντων) as well as κόπ-τω; κύ-μ-βος, Sanscrit *kumbha*, as well as κύπ-τω and κυφ-ός; στρό-μ-βος as well as στρέφω; and in Homer (*Odys.* IV. 84), a certain people are called Ἑρεμβοί, probably the Indians, as the Scholiast writes: οἱ δὲ τοὺς Ἰνδοὺς παρὰ τὸ ἕρεβος, μέλανες γάρ, ὅθεν καὶ Κράτης Ἑρέμους γράφει. If so we may compare the word with ἐ-ρέφ-ω, ὀ-ρφ-νός, ὀ-ρφα-νός, ἕρεμνος. By a similar insertion of μ, ἱα-μ-βος is formed from the root of ἰάπ-τω, but not with the secondary meaning, which some people have given to it, namely, that of satirizing and abusing, as Sophocles says (*Ajax*, 496): λόγοις ἰάπτειν τινά, "to make a person the butt of one's jeers" (comp. θένειν ὀνειδεῖ, *Æschyl. Sept. c. Theb.* 388). It was first pointed out by Lobeck, that the verb ἰάπτω is merely another form of ἄπτω, "to join," in which sense it is used of joining hands in the dance, or of the dance generally, as in Sophocles (*Ajax*, 700):

φάνηθ', ὦ θεῶν χοροποῖ ἄναξ,
ὅπως μοι Νύσια Κνώσι ὀρχήματ'
αὐτοδαῆ ξυνὼν ἰάψης.

The authorities which Lobeck has collected in his note on this passage leave no doubt whatever as to the fact, that ἰάπτειν is here used in the same sense in which we have χορὸν ἄπτειν (*Æschyl. Eumenid.* 307), χεῖρα χειρὶ συνάπτειν (*Aristoph. Thesmoph.* 995), and *nectere brachia* (Ovid, *Fast.* VI. 329). That ἰάπτειν was used as a synonym for ἄπτω, appears from the words of Hesychius, Ἰαψεν. ἔπεμψεν. ἔβαλεν. ἔδωκεν. ἔδησεν, where the editions wrongly read ἔδωκεν: compare Hesych. ἄψω. προσεγγίσω. δῆσω. Κρατῖνος. That the ideas of "joining," "touching," "throwing at," &c., are related, needs no proof; it is sufficiently clear from the use of μετά to signify both "with" and "following after:" and that the ι may be prefixed, even when another form of the word wants the aspirate, is established by the instances which Lobeck quotes: namely, αὔω, ἰαύω; αἶβοι, ἰαῖβοι; ἀπάλλω=ἀποπέμπω compared with ἰάλλω and ἐφιάλτης=δῆπιπιδων; ἄειρε, ἰάειρε=πρόσφερε; ἰῶλα=αὐλακα; ἡδοναί, ἰηδόνες=εὐφροσύναι; οὖρος, ἰωρός; ἄνθος, ἰονθος; ὠκύς, ἰωκή; θώμη, ἰθώμη; θύω, ἰθύω. Compare also the Persian *yāften* with the Sanscrit root *āp-*. In the sense "to kindle," "to set on fire," we may compare ἄπτω with δέω, "to bind," and

δαίω, "to burn," with δῆμος and δημός, and with the English phrase "to catch fire." From all this, we conclude that ἱαμβος, or ἄμβος, is simply a word designating a procession or dance of people in close order, and, by implication, a song or hymn performed by such a body.

318 Having now ascertained the value of the termination, we proceed to investigate the rest of the word. It appears that Διθύραμβος is not only a name of Bacchus, the god in whose honour the song or hymn was chanted (Eurip. *Bacch.* 526), but also a very common proper name (comp. Herodot. vii. 227, with Ælian, *Var. Hist.* vi. 2). We believe that in this use it was only an epithet derived from the song, the subject of which was originally the birth of Bacchus (Διονύσου γένεσις...διθύραμβος λεγόμενος, Plato, *Legg.* iii. p. 700 B), and we think the following considerations will show that the name itself properly refers to this mythological incident. The old legend states, that Bacchus, as soon as he was born, was surrounded with ivy-boughs, and so prevented from sharing in the fate of his mother. Thus Euripides says (*Phæniss.* 650):

Βρόμιον ἔνθα τέκετο
μάτηρ, Διὸς γάμοις,
κισσὸς δ' ὃν περιστεφῆς
ἐλικτὸς εὐθὺς ἔτι βρέφος
χλοηφόροισιν ἔρνεσιν
κατασπίοισιν ὀλβίσας ἐνώτισε,
Βάκχιον χόρευμα
παρθένοισι Θηβαίοισι
καὶ γυναιξίν Εὐθαῖας.

We look upon this passage as an approximate explanation of the word Διθύραμβος. The Scholiast says: ὄντινα Διόνυσον κισσὸς ἔξωθεν περιπλακεῖς ἔτι βρέφος ὄντα κατὰ τοῦ νότου ἐκάλυψεν. ἱστορεῖ γὰρ Μνασέας, ὅτι, Καδμείων βασιλείων κεραννωθέντων, κισσός, περὶ τοὺς κίονας φρεῖς, ἐκάλυψεν αὐτὸν ὅπως μὴ αὐθήμερον καὶ ἐν μηδενὶ τὸ βρέφος διαφθαρεῖ καλυφθὲν κισσῷ. διὸ καὶ περικιόνιος ὁ θεὸς ἐκλήθη παρὰ Θηβαίους. The following are further illustrations of the tradition, that the young Bacchus was enveloped in ivy. Homer, *Hymn* xxv. 9.:

αὐτὰρ ἐπειδὴ τόνδε θεὰ πολύνυμνον ἔθρεψαν,
δὴ τότε φοιτίζεσκε καθ' ὕληντας ἐναύλους,
κισσῷ καὶ δάφνῃ πεπνυκασμένος.

Nonnus, *Dionysiaca*, ix. 11:

τὸν μὲν ὑπερκύψαντα θεηγενέος τοχετοῖο
στέμματι κισσῇεντι λεχωῖδες ἔστεφον Ἑξοραι,
ἔσσομένων κήρυκες.

Philostratus, *Imag.* i. c. 14: ὁ δὲ Διόνυσος τῆς μὲν μητρὸς ἐκθρῶσκει, θαρείσης τὴν γαστέρα, τὸ δὲ πῦρ ἀχλυῶδες ἐργάζεται, φαιδρὸς αὐτὸς οἶον ἀστὴρ τις ἀστράπτων. διασχούσα δὲ ἡ φλόξ ἄντρον τι τῷ Διονύσῳ σκιαγραφεῖ, παντὸς ἥδιον Ἀσσυρίῳ τε καὶ Ἀυδίῳ. ἑλικές τε γὰρ περὶ αὐτῷ τεθῆλασι, καὶ κιττοῦ κόρυμβοι, καὶ ἥδη ἄμπελοι καὶ θύρσου δένδρα, οὕτω τι ἐκούσης ἀνάσχονται τῆς γῆς, ὥς καὶ τῷ πυρὶ εἶναι ἕνα. As it is stated that the Dithyramb was a song relating to the birth of Bacchus, and as it appears that, according to the tradition, the infant god was surrounded with ivy, it would not be unnatural to seek for some connexion between the θύρσος, or ivy-staff of the Bacchanalians, and the Dithyramb, which Simonides of Ceos calls κισσοφόρος (*fragm.* 205, ed. Schneidewin). The word θύρ-σος evidently consist of the root θυρ=θρον or θρι, and the termination -σος, and the analogy of πυρ-σός. This termination, we have seen, implies a collection, as in ὄ-σος, θία-σος, &c. Now the θύρ-σος was a light staff, surrounded with ivy and vine-branches, and terminating in a pine-cone; i. e. θύρσου χλοερὸν κανοφόρον κάμακα, as the epigram aptly describes it. It would be necessary, in order to explain fully the significance of this symbol, that we should investigate the whole question of the worship of Bacchus. As this would be foreign to our present object, we shall merely mention, that Bacchus or Dionysus, as the Sun-god, coincides with the Baal or Moloch of the Phœnicians; as the god of generation with Baal-Peor, whence the symbol of the Phallus used in his worship. Like Hermes, he presided over the friendly intercourse of strangers with one another, as Diodorus says, III, c. 64: (τὸν Διόνυσον) πανταχοῦ πανηγύρεις ἄγειν καὶ μουσικοὺς ἀγῶνας συντελεῖν, καὶ τὸ σύνολον συλλύοντα τά τε νείκη τῶν ἐθνῶν καὶ πόλεων ἀντὶ τῶν στάσεων καὶ τῶν πολέμων ὁμόνοιαν καὶ πολλὴν εἰρήνην παρασκευάζειν; and he is expressly represented as a travelling god, surrounded by attendants bearing *thyrsi* (Diodor. *ubi supra*). In the oldest ages of Greece, when a stranger came to the coast, or in general one person applied to another for protection or hospitality,—and both these classes were designated by the same name, *ἐκέτης*, “the comer,”—it was customary for the suppliant to bear in his hand an olive-bough, surrounded with woollen bands. And thus the Danaïdes are introduced by Æschylus (*Supplices, ad initium*) as singing, on their arrival in Greece:

Ζεὺς μὲν ἀφίκτωρ ἐπίδοι προφρόνως
 στόλον ἡμέτερον—
 τινὶ ἂν οὖν χώραν εὐφρονα μάλλον
 τῇσδ' ἀφικοίμεθα
 σὺν τοῖσδ' ἐκετῶν ἐγχειριδίῳ
 ἐριοστέπτοισι κλάδοισιν;

Nothing could be more natural than that a person landing on a strange

coast, where every foreigner was expected to be a pirate, or, generally, an enemy, and was consequently received and treated as such, should seek for some symbol of peace, some token which would prove to the inhabitants of the country that his intentions were friendly. The most obvious symbol would be the bough of some tree, the one preferred being of course some one of sacred use, the olive for instance; and as fillets of wool were generally employed in the religious rites of the Greeks, it would not be unnatural that they should add these to the bough. In the course of time, when the conventional sign was better understood, they would carry with them a white or gilded staff, which they would surround with wool of foliage, as the occasion served. "This," says Böttiger (*Amalthea*, i. p. 111), "is the proper and original *κηρύκειον*, the staff of Hermes and the herald, and the only one which occurs in the oldest writings and statues. By degrees, several slight alterations were introduced. In common use the green bough was confined to the suppliants for purification. Wound round the staff it becomes the Bacchic thyrsus. The bands, however, remained; only they did not flutter round at random; they were tied up into two bows or loops, and these bows gave rise to the idea of two serpents tied into a knot and looking towards one another." Hence, the Romans called the symbols of the suppliant *supplicia*; Sallust, *Jugurth.* c. 46: *legatos ad consulem cum suppliciiis mittit*. These *supplicia* were boughs of some sacred tree (*vervena*) bound (*supplicata*) round a staff, so that *supplicare* does not mean "to bend the knee," but is derived from these bandages on the suppliant's staff (see Virg. *Æn.* vii. 237; Hor. iii. *Carm.* xiv. 8). This connexion with the *caduceus*, or symbol of peaceful intercourse between strangers, is, however, only a part of the significance of the thyrsus. Bacchus was not only a travelling god and the god of travellers, but also the god of generation; and it is natural to suppose that his peculiar symbols would refer to his functions or to the legend about his birth. The thyrsus was of two kinds: it was either a staff surmounted by a cone and surrounded with ivy, in which case we might suppose that it was a rude imitation of Bacchus Pericionius, the staff representing the body, and the cone the head of the infant god; or it was a bare staff surmounted by a cone which is wrapped up in leaves, in which case we must adopt the explanation of Eustathius (p. 84), that it was the heart of the embryo god which was carried to Jupiter by Pallas—*τὴν τοῦ ἀμβλώματος καρδίαν ἤνεγκε (Πάλλας) τῷ Διὶ*—and must, therefore, suppose that this heart was represented by the cone of the thyrsus. According to this latter view, which we regard as the true one, the staff and cone constituted the *thyrsus*, or emblem of the birth of Bacchus: the ivy round the staff or *νάρθηξ* was perhaps an adjunct borrowed from the

περὶ κίονας φνεῖς of the legend, and also imitative of the olive-bough round the wand of peace. We consider the root of θύρ-σος, namely, θυρ=θυρ- or θρι-, to be the same as that which we find in θρίον. The word θριόβολος is used as a synonym to θυρσόφορος or ναρθηκόφορος (see the passages quoted by Lobeck, *Aglaophamus*, pp. 813 sqq.), and θρίαμβος appears in the same sense as διθύραμβος; so that it is at least probable that the elements θρι- and θυρ- found in these words respectively, are in fact, as they may be according to the laws of etymology, one and the same. Now the word θριαί denotes the sooth-sayer's lots, which, like the dice, were probably used in triplets, and perhaps consisted of leaves (Hesych. θριάξιν φυλλολογείν); θρίον means "a leaf of the vine or fig," and "an olio wrapped up in such leaves;" Hesychius; θριᾶ φύλλα σνκῆς ἢ ἀμπέλων. καὶ τὰ ἐν αὐτοῖς δεσμούμενα βρώματα. Both words therefore are connected with the numeral τρεῖς,—just as θρίναξ stands as a synonym for τρίαινα,—and θρίον may point, in this application, to the shape of the vine and fig-leaf. For this reason, perhaps, the Cretans called the vine θρινία; Hesychius: θρινία. ἄμπελος. ἐν Κρήτῃ. In the plural, θριοι means the three stays (ἔκφοροι) going from the topmast to each side of the ship and to the bowsprit. The third pronouns appears still more obviously in the reduplicated synonym τέρ-θριος. In its application to the thyrsus, this word points to the mystical number "three" (Böttiger, *Amalthea*, i. p. 137), which is also referred to in the epithet τριπέτηλος, applied to the mystical wand which Apollo gave to Hermes: *Hömer, Hymn. in Mercur.* 530:

αὐτὰρ ἔπειτα
ὄλβου καὶ πλούτου δώσω περικαλλέα ῥάβδον,
χρυσέην, τριπέτηλον, ἀκήριον, ἥ σε φνλάξει,

in the τριετηρίς of which Bacchus was the inventor (*Cic. Nat. Deor.* iii. 23), and perhaps also in the epithet τρικέφαλος applied to Hermes (*Harpocration*, s. v. p. 334; *Etymol. Magn.* s. v. p. 694). If, then, θύρσος is connected with θρίον, it will signify "a gathering of three leaves, and that which they contain, at the end of a rod," just as πυρ-σός denotes "a torch," i. e. "a gathering of fire at the end of a piece of wood." Hartung (*Class. Mus.* vi. 372 sqq.) proposes to connect διθύραμβος with θόρυβος. If the one were really a by-form of the other, we should have θόρυμβος, not θύραμβος, (cf. κόρυμβος, ἱθυμβος, &c.). As, however, the dithyrambic dance was called τυρβασία (*Jul. Poll.* iv. 104), and as the roots θυρ-, θρι-, as well as θορ-, θρο-, might be connected with that of τύρβη, *turba*, from which τυρβασία is formed, a question might arise, whether the name of the θύρ-σος was derived from the tumultuous clamours (θρόος, θροέω, θρούλλος, &c.) of the θίασος

of Bacchus; or whether it was expressive of the symbolical meaning of the Bacchic staff with its accompaniments: and this would lead to the inquiry, whether *θύρ-σος* signified primarily the distinctive staff (cf. *πύρ-σος*) or the party who bore it (cf. *θία-σος*), according to the transition in the Latin *manipulus* (Ovid, *Fast.* III. 117). In our opinion, we must refer to three distinct origins, the *θύρ-σος* or three-leaved emblem (*θηρι-*), the *θία-σος* or sacred band (*θεός*), and the *τυρ-βα-σία* or noisy crowd (*θηρο-*, *θορ-*).

319 The quantity shows that the first syllable of *Δι-θύραμβος* is a contraction of *Διτ*, like that of *Δι-πόλια*, *Δι-φιλος*, and *Δι-σωτήριον* Bekker. *Anecd.* I. p. 91), and thus the whole word will signify "a chorus or song celebrating the birth of Bacchus," i. e. "the bringing to Jupiter of the *θηριον* or leaf-enveloped heart or body of the god." The termination, as we have explained it above, is particularly applicable to the dithyramb, which was performed by a chorus of fifty persons dancing hand in hand (*ἀλλήλων ἐπὶ καρπῷ χειρὸς ἔχοντες*, Homer, *Iliad* XVIII. 594) round a blazing altar in honour of the sun-god.

320 It is right to mention an explanation of the thyrsus adopted by some of the more recent Greek writers and by the Roman poets. They supposed that the thyrsus was a spear concealed in ivy, or having the point covered by the cone: thus Justin Martyr (quoted by Schneider): *ὥσπερ αἱ βάκχαι διὰ σχήματος εἰρηνικοῦ τὰς λόγχας ἐν τοῖς θύρσοις περιφέρουσι*. Catullus, LXIV. 257.

Horum pars tecta quatiebant cuspidē thyrsos.

Seneca, *Herc. Fur.* (quoted by Schneider):

Tectam virenti cuspidem thyrsos gerens.

But Ovid (*Metamorph.* XI. 9) distinctly implies that the thyrsus had no point:

Hastam

Quæ foliis præserta notam sine vulnere fecit.

and the learned Virgil says (*Æneid* VII. 396):

Pampineasque gerunt, incinctæ pellibus, hastas,

which he calls (v. 390) *molles thyrsos*; Lucian, too (*Bacchus*, c. I. p. 292 Lehm.), describes the Bacchanalians as *κιττῷ ἐστεμμέναι, νεβρίδας ἐνημμέναι, δόρατά τινα μικρὰ ἔχουσαι, ἀσίδηρα, κιττοποιητὰ καὶ ταῦτα*, where, although he calls the thyrsus a spear, he does not give it a point; and Diodorus (III. c. 64) distinctly says that they sometimes had spears covered with ivy "instead of *thyrsi*:" *ἀναδιδόναί γὰρ ταῖς βάκχαις ἀντὶ τῶν θύρσων λόγχας τῷ κιττῷ κεκαλυμμένας*

τὴν ἀκμὴν τοῦ σιδήρου. So that it appears probable that this notion of the thyrsus was a misconception resulting from a legend, that the covered spear was sometimes substituted for the peaceful emblem of the Bacchanalians. The νάρθηξ itself would be much too light for a spearshaft.

321 (2) *Καλοκάγαθος**. The general meaning of *καλὸς κἀγαθός* has long been well known, and Englishmen are in the habit of congratulating themselves that their word "gentleman" is the only modern term which precisely expresses the meaning of the Greek compound; an opinion in which foreign writers seem, on the whole, to concur. But it does not appear to have been satisfactorily shown how a combination of these two simple adjectives came to denote such a complex idea, nor have the moderns sufficiently distinguished between the political and moral use of the word. For instance, one of the greatest and most learned of our theologians supposes that the use of *καλοκάγαθία*, to signify moral perfection, is derived from the literal subsequent meaning of its two component parts. "That which is good in the actions of men," says Hooker (*Ecclesiast. Polity*, I. § 8, p. 281 Keble), "doth not only delight as profitable, but as amiable also. In which consideration the Grecians most divinely have given to the active perfection of men, a name expressing both beauty and goodness; because goodness, in ordinary speech, is, for the most part, applied only to that which is beneficial." Writers of our own time have given still more vague and general interpretations†. We think, therefore, that it will not be unadvisable to examine, with more minuteness than has generally been done, what is the primary meaning of each of the adjectives *καλός* and *ἀγαθός*, what is the sig-

* There is a difference of opinion as to the proper mode of writing and accentuating this combination of three words. Some write *καλοκάγαθος*, with the accent drawn back and without any mark of crasis. Lobeck has *καλοκάγαθος* in his text (*ad Phryn.* p. 603) and *καλοκαγαθός* in his index (p. 805). Ast has *καλοκαγαθία* in his text (*Plat. Def.* 412 E), but *καλοκάγαθία* in his *Lexicon Platonicum* (II. p. 133). Meineke has *καλοκαγαθεῖν* in his *Fragm. Com.* II. p. 1033. But Jacobi in the *Comicæ Dictionis Index*, p. 505, has *καλοκάγαθεῖν*. We prefer the orthography given in the text, for as long as the second adjective retains its inflexions, the word is not only parathetic, but separable in the plural and in the other cases. And we would retain the apostrophe even in the adverb *καλοκάγαθως* and in the derivatives *καλοκάγαθία* and *καλοκάγαθιμός*.

† Thus Passow says (*Meletemata Critica in Æschyli Persas*, p. 31, ed. Bach): "*Interior civilis bellicæque prudentiæ concentus, qui sub nomine καλοκάγαθίας uno vocabulo complectebatur.*" Delbrück's definition is still looser (see *Philol. Mus.* I. p. 503).

nificance of this compound as a political term, and what its application as a moral epithet.

322 With regard to the second adjective, ἀγαθός, little remains to be done: Welcker, in his admirable introduction to Theognis (pp. xxi fol.), has collected nearly all the passages bearing on the subject, and has clearly shown that the Greek ἀγαθοί, as also ἄριστοι, ἀριστῆες, &c., the Latin *boni, optimi, optimates*, and the old German *Rachinburgi, gute Männer, Gudemänner, guden Manne*, and *Herrn von Rechte*, are names of the nobles, the men of rank, and of good family, in a state. To which, in Greek, κακοί, δειλοί, as epithets of the common people, are regularly opposed; an opposition which has taken such deep root, that it is even preserved in compounds: e. g. κακόπατρις (Alcæus, *fr.* 9), and κακογείτων (Sophocl. *Philoct.* 688, *Herm.*). Of the last word Welcker writes as follows (*Rhein. Mus.* for 1833, p. 450): “κακογείτων is a low-born, common neighbour, a poor native dwelling by a man of the noblest extraction, which is also mentioned v. 180:

οὔτος πρωτογόνων ἴσως
οἴκων οὐδενὸς ὕστερος.

In the verses below, the low-born native finds his opposite, when the chorus says: νῦν δ’ ἀνδρῶν ἀγαθῶν παιδὸς ὑπαντήσας.” In the same political sense as οἱ ἀγαθοί, the Greeks used οἱ ἐσθλοί, οἱ βέλτιους, τὸ βέλτιστον, οἱ βέλτιστοι, as opposed to the δῆμος (Xenophon, *passim*). An older word of the same import was ἀχαῖα (Λάκωνες, ἀγαθά, Hesych.), χάος, χαῖος, χάϊος, whence, according to some, the names of the Achæans (= ἀγαθοί, ἀριστῆες. Müller, *Prolegom. zur Mythol.* p. 291. *Comp. Journ. of Educat.* III. p. 87; *Philol. Mus.* II. 88: see however *Phil. Mus.* II. 367: above, p. 165) and Chaonians (Welcker, *ad Theogn.* p. xxviii, note) were derived, just as the name of the Goths was derived from *gôths, gôda*, “good” (Savigny, *Gesch. Röm. Rechts*, I. p. 194).

323 The derivation of ἀγαθός is a great stumblingblock to etymologists. Bopp would connect it with the Sanscrit *agādha-s*, “deep” (*Vergl. Gramm.* p. 441); this we consider undoubtedly erroneous. Pott’s suggestions* (*Etymol. Forsch.* II. p. 299) do not merit the slightest attention, nor can we say much in favour of Passow’s derivation from ἄγαν. We consider the first letter to be one of those

* Surely he is joking when he proposes to regard it as a compound of ἄγαν and καθαρός!

movable initials, of which we have already spoken more than once, and we class all the following words together; ἄ-γα-θός, ἡ-γά-θεος, γη-θέω, ἄ-γανός, ἄ-γα-μαι, ἄ-γαλο-μαι, ἄ-γαν-ρός, γαύ-ρος, γαν-ριάω, Latin *gaudeo*, γά-νος, γά-νυμι, γάλεν, γαδιάδας (ἥρωος ὄνομα ὃς καὶ τοὺς καταφeyγοντας εἰς αὐτὸν ὀύεται ἐκ θανάτου, Hesychius), γαδεῖν γάδεσθαι, γαδέω (χαρά, Hesych.) The meaning which runs through most of these words is that of "pleasure," "joy," "delight:" ἄ-γαμαι, into which the idea of "wonder," &c., frequently enters, derives this meaning from a primary one of pleasure, for the wonder implied is always considered as a pleasurable sensation; and the word really signifies in an infinity of passages, as well in the most ancient as in the more recent authors, "to be pleased with," "to delight in," "to think highly of." We have before shown how the synonymous root χα-ρ- derives all its meanings from the primary one of "containing;" thence, "support," "firmness," &c. We find this root with a set of formations corresponding in the main to those of the root γα-. The primary meaning of the root χα- or χαF is "containing" (χά-ω, χαῦ-νος, &c.), thence, "firmness," "hardness," the earth (χέ-ρ-σος, χο-ρός, χῶ-ρα, &c.), thence, help or assistance in battle, and pleasure in such assistance (χάρις, &c.), then it becomes the epithet of a person who can so help us (χορήσιμος), and finally of an order in the state, composed of the best warriors or chief men (χορηστοί, &c.). To this last meaning belongs the old word χαός (or χαίος, Lobeck, *Phryn.* p. 404), where the termination -ρος is omitted. Similarly from γα-, we have the primary idea of firmness or support, the earth (γαῖα, γῆ); assistance in battle (as in the patronymic γα-τιάδας), joy, pleasure in general (in most of the words quoted above); and thence the epithet of a warrior, a person able to help in battle, and the upper class in society, which was composed of such warriors (ἀγαθοί, &c.). We do not presume to say that the roots γα- and χα- are identical, though this is not impossible; it is, however, important to observe this correspondence in their applications. The class of nobles being continued by hereditary descent, ἀγαθός came to express not only the bravery, which was one of their qualifications, but also their good descent, which was another, so that ἀγαθός became a synonym for εὐγενής; and thus Hesychius (*s. v.* ἀγαθόν) rightly defines the epithet as signifying both ἀνδρεῖος and γενναῖος; conversely, γενναῖος is used as a synonym for ἀγαθός, in the meanings "brave," "strong," "great" (in Sophocle, *Aj.* 938: γενναία δύη is explained ἰσχυρά by the Scholiast), just like *gnavus*, *ingens*, from *gigno*, in Latin. Another obvious quality of the nobles was their wealth, and thus we find as synonyms for the ἀγαθοί, such adjectives as οἱ πλούσιοι, οἱ εὐποροί, οἱ τὰ χρήματα ἔχοντες, οἱ πάχες, and (because it was considered a great mark of

wealth to keep a horse, Aristot. *Polit.* iv. 3), *ἰππεῖς, ἰπποβόται, ἰππόδαμοι*, &c. In Thucydides they are called *δυνατοί* (i. 24), *οὐχ οἱ ἀνδυνατωτατοί* (i. 5), and wealth is called *δύναμις* (i. 2). In opposition to these terms, the lower orders are called *πένητες*, and thus, in the words of Aristodemus, as reported by Alcæus,—"it was money that made the man, there was no goodness nor honour in the poor" (*χορήματ' ἀνὴρ, πενιχρὸς δ' οὐδείς πέλετ' ἐσλὸς οὔτε τίμιος*. *Ap. Schol. Pind. Isthm.* ii. 17). But, in the matter of wealth, that a man might be really a gentleman, he must have inherited his riches, so that the other qualities of the nobles are presumed in their epithets implying opulence. For instance, in Æschylus (*Agamemn.* 1010) we read: *ἀρχαιοπλούτων δεσποτῶν πολλὴ χάρις*, which is thus explained by Aristotle (*Rhet.* ii. 32): *διαφέρει δὲ τοῖς νεωστὶ κεκτημένοις καὶ τοῖς πάλαι τὰ ἥθη, τῷ ἅπαντα μᾶλλον καὶ φανλότερα τὰ κακὰ ἔχειν τοὺς νεοπλοῦτους, ὥσπερ γὰρ ἀπαιδευσία πλοῦτου ἔστι τὸ νεόπλουτον εἶναι*. From the tithes, &c., which they received, the nobles were called *δωροφόροι*, from the lands which they occupied *γεώμοροι*, from their conspicuous position *γνώριμοι* or "notables."

324 The adjective *καλός*, which has the penultima long in Homer and the old epic poets, stands for *καδ-λός*, and is connected with *κέ-κασ-μαι*, *κέ-καδ-μαι*, *κε-καδ-μένος*, *κάδ-μος*. Döderlein, to whom this etymology is due, justly remarks (*Lat. Syn. und Etym.* iii. p. 38) that it may be compared to *ἐάνος* for *εαδνός*, and the more so as *δλ* does not belong to the Greek *ecphoneses*: and in another place (iii. p. 97) he shows that *κα-λός* and *και-νός* (*και-νυ-μαι* is the ordinary form of the present for *κέκασμαι*) are connected, as *canus*, *candidus* with *re-cens* and as *δει-νός* with *δει-λός* from *δείδω*. It is possible that *κάλος* may have been written originally with a doubled *λ* like *κάλλος*: compare *bellus* for *benulus*. The primary meaning of the word is in strict accordance with this derivation; it signifies "furnished with outward adornments," in general, "that of which the outward form is pleasing," and thus it is regularly opposed to *αἰσχρός*, especially in Plato (*Hipp. Maj.* 289 A, *Protagor.* 332 c, *Sympos.* 183 D, &c. &c.), and *αἰσχρὸς καὶ κακός* is opposed to *καλὸς καὶ ἀγαθός* (Plato, *Sympos.* 201E). But to the Greek notion of *κάλλος* something beyond mere outward garnishing of the person was required; it was not a languishing beauty, a listless though correct set of features, an enervated voluptuousness of figure, to which the homage of their admiration was paid. It was the grace and activity of motion which the practice of gymnastic exercises was calculated to promote—the free step, the erect mien, the healthy glow, combined with the elegances of conversation and the possession of musical accomplishments; it was in fact the result of an union of the *μουσική* and *γυμναστική*, of which their

education was made up. It was this that constituted beauty in the Greek sense of the word—the educated man alone was considered *καλός*; thus Æschines says (*in Ctesiph. ad fin.*): *παιδεία, ἣ διαγινώσκομεν τὰ καλὰ καὶ τὰ αἰσχροῦ*, and in the Attic writers in general this adjective is used as an epithet of persons distinguished by their accomplishments (see the passages quoted by Heindorf *ad Plat. Hipp. Maj.* § 1). Now the people of rank and wealth were always then, as they are now, most able to obtain the advantages of education; they had more leisure than the common people to devote themselves to those exercises which were calculated to produce grace and ease of motion and the other accomplishments necessary to the gentleman; and as the aristocracy, like the knights of the middle ages and the *duinhe-wassals* in a Highland Clan, owed much of their reputation for superior valour to their being better furnished with arms, and, from leisure and practice, more skilled in the use of them, so they derived their superior accomplishments in music, dancing, &c., from the same source; the best dancer and the best fighter were synonymous, the first in the chorus and the foremost in the battle array were the same persons; they were the nobles, the pre-eminently *καλοὶ καὶ ἀγαθοί*. It was from this that they are called *χαριέντες*, and the same idea is clearly seen in the use of *κόσμος* as an old political term.

325 If there were any doubt with regard to what we have just stated, it would be removed by the following passages. In fact the *καλοὶ κἀγαθοί* are actually described according to this definition by Euripides (*Ion*, 598):

ὅσοι δὲ χρηστοί, δυνάμενοι τ' εἶναι σοφοί,

where *χρηστοί* is, as we have seen, another name for the *ἀγαθοί*, and *δυνάμενοι εἶναι σοφοί* expresses that facility of acquiring knowledge and accomplishments by the attainment of which the nobles became *καλοί*. Again, in the same author (*Alcestis*, 605):

*τὸ γὰρ εὐγενὲς ἐκφέρεται πρὸς αἰδῶ,
ἐν τοῖς ἀγαθοῖσι δὲ
πάντ' ἔνεστιν σοφίας.*

Here the *αἰδῶς* is that sense of honour which is the natural accompaniment of gentle blood, and to which the nobles owed their innate valour; thus Ajax says (*Iliad* xv. 561):

*ὦ φίλοι, ἀνέρες ἐστὲ καὶ αἰδῶ θέσθ' ἐνὶ θυμῷ,
ἀλλήλους δ' αἰδεῖσθε κατὰ κρατερὰς ὑσμῖνας.
αἰδομένων ἀνδρῶν πλέονες σοοὶ ἢ πέφανται,
φειγόντων δ' οὐτ' ἄρ' κλέος ὄρνυται οὔτε τις ἀλκή,*

and Archidamus, in Thucydides (i. 84), distinctly attributes the

bravery of the Spartan aristocracy to the possession of this quality: "our good κόσμος," says he, "makes us πολεμικοί, ὅτι αἰδῶς σωφροσύνης πλεῖστον μετέχει, αἰσχύνῃς δὲ εὐψυχία," where αἰσχύνῃ is used as a synonym for αἰδῶς, as in *Æsch. Sept. c. Theb.* 394:

μάλ' εὐγενῇ τε καὶ τὸν αἰσχύνῃς θρόνον
τιμῶντα, καὶ στυγοῦνθ' ὑπέροφρονας λόγους—
αἰσχροῦ γὰρ ἀργός, μὴ κακὸς δ' εἶναι φιλεῖ.

We take this opportunity of explaining a passage in Pindar (*Olymp.* vii. 44), where Böckh and Dissen, misled by the Scholiast, have mistaken the sense of αἰδῶς. Pindar is saying that valour (ἀρετή) and warlike spirit (χάρματα) are produced by that sense of honour (αἰδῶς) which springs from provident forethought (προμηθεύς), i. e. from a careful attention to the rules which regulate the conduct of honourable men; he expresses the sentiment thus:

ἐν δ' ἀρετὰν
ἔβαλεν καὶ χάρματ' ἀνθρώποισι Προμαθέος Αἰδῶς.

For the phraseology compare *Hom. Il.* xiii. 82: χάρμη γηθόσυννοι, τὴν σφιν θεὸς ἔμβαλε θυμῷ, and see *Pind. Ol.* xiii. 16. Προμηθεύς here is not the Titan, but the more general word equivalent to πρόνοια or φρόνησις (see *Welcker, Trilog.* p. 70, note), and Αἰδῶς is called the daughter of Προμηθεύς by an allegorical genealogy similar to that in *Æsch. Sept. c. Theb.* 208 (above, § 305):

Πειθαρχία γὰρ ἐστὶ τῆς Εὐπραξίας
μήτηρ, γυνὴ Σωτήρος· ὧδ' ἔχει λόγος.

"Obedience produces good fortune, and helps men as much as the preserving Jupiter." The passage in Pindar is introduced as an old saw like this (ὧδ' ἔχει λόγος), and should perhaps be printed between inverted commas, like many other aphorisms in that author. The stress is to be laid upon the word Προμαθέος, the fact spoken of being only the want of care on the part of the Rhodians, in not offering burnt sacrifices to Zeus and Athena. Similarly, Pindar (*Pyth.* v. 25) makes Excuse (Πρόφασις) the daughter of tardy-witted Afterthought (Ἐπιμαθέος ὀψινόου θυγατέρα)*.

326 As the wealth of the nobles enabled them to provide themselves with a more expensive panoply, to appear, in fact, as heavy-armed men with the δόρυ καὶ ξίφος καὶ τὸ καλὸν λαισήμεον πρόβλημα

* By a strange oversight Max Müller in referring to this language substitutes Apophasis for Prophasis, though he uses the proper English word Excuse (*Oxf. Ess.* 1856, p. 44).

χρωτός (*Hybrias ap. Athen. p. 695 f*), arms which the poorer classes were unable to buy, and which they were not generally even permitted to possess (see *Thucydides, iii. 27*); and as their leisure allowed them to acquire skill in using their arms, and to spend most of their time in the open air, which was essential, in their opinion, to the full development of the bodily powers, all these attributes would become mixed up with the definition of a man of rank, and by taking a part for the whole might be considered as constituting his definition. On the contrary, the poorer people were taunted with epithets derived from their sedentary employments, which took away from the grace of the person; thus *Aristot. Polit. viii. 1*: διὸ τὰς τε τοιαύτας τέχνας ὄσαι τὸ σῶμα παρασκευάζουσι χειρὸν διακειῖσθαι βαναύσους καλοῦμεν, cf. *i. 11*: βαναυσόταται [τῶν ἐργασιῶν], ἐν αἷς τὰ σώματα λωβῶνται μάλιστα: and it seems that βάνανσος was almost regarded as signifying “unmilitary,” or at least as denoting some occupation inconsistent with a devotion to warlike exercises; thus *Sophocles* makes *Menelaus* say to *Teucer* (*Aj. 1096*): ὁ τοξότης ἔοικεν οὐ σμικρὸν φρονεῖν, to which he answers, οὐ γὰρ βάνανσον τὴν τέχνην ἐκτενέσμεν; see the defence of the bow in *Eurip. Herc. Fur. 188 sqq.*; cf. *Herod. ii. 165*: καὶ τούτων βαναυσίης οὐδεὶς δεδάγκε οὐδέν, ἀλλ’ ἀνέονται ἐς τὸ μάχιμον. But although the light-armed troops were necessarily composed of the lower order of people, yet all these were not βάνανσοι; at least *Aristotle* says (*Polit. iv. 3*): καὶ τῶν εὐπόρων δὲ καὶ τῶν ἀπόρων τὸ μὲν ὀπλιτικὸν τὸ δὲ ἄνωπλον, καὶ τὸν μὲν γεωργικὸν δῆμον ὀρῶμεν ὄντα, τὸν δ’ ἀγοραῖον, τὸν δὲ βάνανσον.

As a political term, then, *καλὸς κἀγαθός* implied no particular moral excellence: it is merely the name of the upper class, “the accomplished and well-born,” as opposed to the *δῆμος* (*Thucyd. viii. 48*; *iv. 40*). Hence, the *Scholiast* on *Aristides* (*iii. p. 446 Dind.*) says: οἱ μὲν γὰρ ἦσαν καλοὶ καὶ ἀγαθοὶ οἱ καλούμενοι ὀλιγαρχικοί, οἱ δὲ δημοτικοί. Sometimes, indeed, it would seem to imply nothing more than good descent, as when *Herodotus* uses it as a synonym for *Piromis* (*ii. 143*).

327 The application of this compound to denote moral excellence is thus explained by *Aristotle* (*Polit. iv. 83*): εἰώθασι δὲ καλεῖν—τὰς πρὸς τὴν ὀλιγαρχίαν μᾶλλον (ἀποκλινούσας) ἀριστοκρατίας διὰ τὸ μᾶλλον ἀκολουθεῖν παιδείαν καὶ εὐγένειαν τοῖς εὐπορωτέροις. ἔτι δὲ δοκοῦσιν ἔχειν οἱ εὐποροὶ ὧν ἔνεκεν οἱ ἀδικοῦντες ἀδικοῦσιν ὅθεν καὶ καλοὺς κἀγαθοὺς καὶ γνωρίμους τούτους προσγοροῦσιν. The philosopher, however, has reversed the natural order, for the rich were not called *καλοὶ κἀγαθοὶ* on account of their respectability, but conversely, the name of the upper classes, from

their general respectability, came to be used as synonym for "respectable." A more apt instance would have been the use of *ἐπιεικής* as a synonym for *καλὸς ἀγαθός*. It was because the better classes, having no temptations like their poorer brethren, abstained from those vices which common opinion reprobated, that their regular name became an epithet descriptive of good moral conduct: thus Aristophanes says (*Ran.* 7, 8): *τῶν πολιτῶν τοὺς καλοὺς τε ἀγαθοὺς—οὓς μὲν ἴσμεν εὐγενεῖς καὶ σῶφρονας ἄνδρας ὄντας καὶ δικάιους*, and Æschines opposes it to *φάυλος* (in *Ctesiph.* p. 65, 1): *οὐδ' ὅστις ἐστὶν οἴκοι φάυλος, οὐδέποτε ἦν ἐν Μακεδονίᾳ, κατὰ τὴν πρεσβείαν, καλὸς ἀγαθός*. For this sense of *φάυλος*, see Thucyd. vi. 18: *τό τε φάυλον καὶ τὸ μέσον καὶ τὸ πᾶν ἀκριβεῖς*. Eurip. *Bacch.* 431: *τὸ πλῆθος ὅτι τὸ φανλότερον ἐνόμισε χρῆται τε*. Plato, *Resp.* iv. p. 431 c: *καὶ τῶν ἐλευθέρων λεγομένων ἐν τοῖς πολλοῖς τε καὶ φάυλοις*. The older Greeks did not imagine that good descent really proved the possession of moral excellence, though they believed in the transmission of luck, and so forth; they looked only to the advantages which the better classes possessed; they would have had little sympathy for the Christian chivalry which adorns the enthusiastic pages of Mr. Digby (*Godefridus*, pp. 225 foll.); and though Theognis and the advocates of the aristocracy strove to instil into their readers or hearers that goodness was innate in the nobility, their doctrines were rejected by the democratical spirit of the great literary nation of Greece, and overthrown by the philosophy of Socrates; so that after all they only succeeded in inserting in the philosophical vocabulary one of the old titles of rank, of which the original political meaning was, as we see from Aristotle, soon merged in the new moral use.

328 Much the same has been the fate of the Latin *gentilis*. This word originally signified "one who belonged to a patrician *gens* or clan," in fact, a patrician, and from this it has gone through the Italian *gentiluomo*, the French *gentilhomme*, to our "gentleman," a word which combines the old political meaning of rank with an expression of those moral and social qualities, which we consider, though generally found along with rank, to be attainable by every one. The adjective has diverged in our language into two, namely, "gentle," expressing the moral meaning; and "genteel," conveying the idea of rank.

329 The word *ἥρωας*, in its old Homeric use, did not imply any deification or super human qualities; it was merely a title expressing military pre-eminence applied to all the heavy-armed fighters mentioned in the old poems; it meant, in fact, nothing more than a good

soldier: it was originally a title of rank, and had become indiscriminately assigned to all distinguished soldiers, just as the word *knight* was extended in the middle ages to all fighters, and translated *miles* by the monks. We shall not quote from Homer to prove this; all the passages have been collected and the general fact established by a writer in a work which we hope is accessible to most of our readers (*Philolog. Mus.* II. pp. 72 foll.). That ἥρωας was originally a title of rank we think appears from the following considerations. The termination points to a derivation from ἥρα. That the genuine form of the word was ἥρφαυτος, i. e. "the noble warrior," may be inferred from the form ἥρφαυῖος, which is so written in the Olympic tablet: Böckh, *C. I.* I. pp. 26 sqq.; and thus ἥρακλῆς, whose connexion with the goddess ἥρα does not appear to be a sufficient cause for his name, may have been so called as the representative of the race of Heroes (see Pott, *Etymol. Forsch.* II. p. 324). Hesychius says that ἥραιος was another name for ἥρακλῆς, and ἥραιος bears the same relation to ἥρωας that γηραιός does to ἀγγήρωας. However, it is obvious, as we have just shown, that ἥρωας and ἥρα are themselves connected; and how they are related will appear from an investigation of the latter name. The goddess Hera is always spoken of as presiding over or connected with marriage-rites; the chief feature in her mythology is her sacred marriage (ἑρὸς γάμος) with Zeus (Diodor. Sic. v. c. 72); her three names, παρθενία (Pindar, *Olymp.* VI. 88), τέλεια (*Nem.* x. 18), χήρα (Pausan. VIII. 22, 2), show that she represented marriage and its two periods of negation, according to the principle of contrast which we have pointed out on a former occasion (*Theatre of the Greeks*, 6th edition, p. [22]). The name τέλεια, as applied to Juno, refers to the γάμοιο τέλος spoken of by Homer (*Odys.* xx. 74):

εἴτ' Ἀφροδίτῃ διὰ προσέστιχε μακρὸν Ὀλυμπον
κούρης αἰτήσουσα τέλος θαλεροῖο γάμοιο,

which is called γαμήλιον τέλος by Æschylus (*Eumenid.* 838), and refers to the marriage-rites as an initiation into a new life (Ruhnken, *Timæus*, p. 224). Ἥβη appears as the wife of ἥρακλῆς, and the daughter of ἥρα (Pind. *Nem.* x. *ubi supra*).

330 The common epithet expressing lawful marriage in Homer is κουρίδιος, as κουριδίη ἄλοχος, κουριδίη γυνή, κουρίδιος φίλος, &c. (Buttmann, *Lexilog.* I. 32), and κύριος was the Athenian name for the husband in reference to the wife, as δεσπότης was of the master in reference to his female slave. Thus Aristophanes (*Equites*, 969):

χρυσοῦ διώξει Σμικύθην καὶ κύριον,

alluding to the custom of including the husband in actions against

the wife, as the Scholiast observes: τὸν Σμικύθην κωμωδεῖ ὡς κί-
ναυδον, κύριον δὲ λέγει τὸν ἄνδρα. οὕτω γὰρ ἐπεγράφοντο ἐν
τοῖς δικαστηρίοις, Ἀσπασία καὶ κύριος, τουτέστιν ὁ Περικλῆς. Also
κόρος, κόρης, κύρβας, κυρσάνιον, κύρνος, were names of children
born in lawful marriage, especially those of the upper classes. Thus
in Critias (*apud Athenæum*, p. 432 f):

οἱ Λακεδαιμονίων δὲ κόροι πίνουσι τοσοῦτον
ὥστε φρέν' εἰς ἱλαρὰν ἀσπίδα πάντ' ἀπάγειν.

and in Plutarch (*Lycurg.* xiv. 47): οὐδὲν ἥττον εἵθισε τῶν κόρων τὰς
κόρας γυμνάς τε πομπεύειν καὶ πρὸς ἱεροῖς τισὶν ὀρχεῖσθαι καὶ ἄδειν
(Welcker in *Theogn.* p. xxxiii). But κύριος and the cognate κοῖρανος
were also used as titles of honour, as signifying a lord and master.
There is, therefore, on this side at least, a connexion between the
words referring to marriage and those expressing rank and dignity.
Such is also the case in the German *Ehe*, "marriage," and *Elhre*,
"honour."

Buttmann rightly observes (*Lexil.* i. p. 35, note), that on the
analogy of κοῖλος, Germ. *hohl*, κάλαμος, Germ. *Halm*, Germ. κύων,
Hund, &c., we might fairly place κουρίδιος by the side of the German
Heurath, more anciently written *Heurde*, and compare κύριος with
Herr. Now the Latin *herus* is a perfect synonym to κύριος, and its
analogy to *Herr* cannot be denied. Moreover Ἑρῶος was another
name for Ζεύς (*Hesych. s. v.*), and as the old Greek gods went in pairs,
and Zeus and Hera were conjointly worshipped as presiding over the
marriage-rites (*Diodorus, ubi supra*), we may well suppose that this
is but another way of writing the masculine of Ἥρα. From these
analogies alone it is probable that ἥρως and κύριος may have a cognate
origin. It is to be observed that even in Homer κούρητες are synony-
mous with ἥρως; thus *Il.* xix. 193: κρινάμενος κούρητας ἀριστῆας
Παναχαῶν. Compare the Latin *Quirites, Curiatii*, &c. (*Varron.* p. 24).
On the connexion between κύρβας, κορύβας, and the helmets of these
personages, see Lobeck *ad Soph. Ajac.* 817; *Aglaopham.* 1144.

331 There is a word in Aristophanes which it seems impossible
not to connect with κύρβας ("crested"), κύρβεις ("pyramids"), κυρη-
βάξω ("to butt with the horn"), κυρβασία, κυρηβασία, &c., and which
still remains unexplained. We refer to the genitive plural κυρηβίων,
which we find in the well-known passage about Eucrates, *Equites*, 253:

ἐλπαβοῦ δὲ μὴ' κφύγη σε· καὶ γὰρ οἶδε τὰς ὄδους
ἄσπερ Εὐκράτης ἔφενγεν εὐθὺν τῶν κυρηβίων.

And the same allusion is contained in the fragment quoted by the
Scholiast on v. 254: καὶ σὺ κυρηβιοπῶλα Εὐκράτης στύππαξ. All

the grammarians explain *κυρηβίων* with reference to a neuter plural *κυρήβια*, by which they understand "bran," or "the husks of barley." Thus the Scholiast, on v. 253, says: *κυρήβια δέ εἰσι τὰ πίτυρα καὶ ἄχυρα τῶν πυρῶν ἢ κριθῶν*. Similarly, *Bekkeri Anecd.* p. 272, l. 24. Hesych.: *κυρήβια· τῶν κριθῶν τὰ ἀποβρέγματα καὶ κνύμων λέπυρα καὶ τὰ τῶν κέγχρων ἄλφιστα*. The Scholiast, on v. 253, understands by *κυρήβια*, "the kiln," *ἐνθα αἱ κάρχους φρύγονται*, and this is so far right; since *ἐνθύν*, with the genitive, always expresses motion to or towards a place. We do not, however, see very well by what etymology *κυρήβια* can lead to this result; for if we suppose that it refers to the beards, as crests of the barley, we do not obtain a very perspicuous definition of the place of refuge which Eucrates found so convenient. An entirely different interpretation has suggested itself to us. We infer from Xenophon (*Memorab.* II. 7, § 6) that Cyrebus was the chief baker at Athens; in an enumeration of the most successful tradesmen in the city, Socrates is made to say: *ἀπὸ δὲ ἀρτοποιίας Κύρηβος τήν τε οἰκίαν πᾶσαν διατρέφει καὶ ξῆ δαψιλῶς*. Such being the case, nothing is more natural than that the favourite loaves at Athens should be called *κυρήβιοι ἄρτοι*, and the place where they were made *κυρήβια*. Nay, even the waste of the flour may have got its name from the chief dealer. Now Eucrates was properly a hemp-seller (*Equit.* 129); and it is to be supposed that he is called *κυρηβιοπώλης*, because he bought up a quantity of bread and distributed it to the poor, according to the method adopted by the *ἀλλαντοπώλης* in regard to the *κορίαννα* (*Equit.* 676). And if this was his usual way of getting out of a difficulty, it might be said of him that he used to fly straight to the *Cyrebia*, i. e. to the establishment of the great bakers. As the name of a man, *Κύρηβος* is a complimentary title; and Epicrates was known by the patronymic *Κυρηβίων* (Demosth. *Fals. Leg.* p. 434, 21).

332 The Sanscrit *virās* (Latin *vir*) signifies "a warrior, a champion, a hero;" as a feminine, *virā*, it denotes "a matron, a wife, and mother;" and as an adjective it expresses the qualities "excellent, eminent, heroic, powerful," &c. From this is formed the abstract *vaira*, "heroism." In the same language we have, as a synonym to *viras*, the word *çûras*, of which the first letter, as we have often seen, corresponds to a Greek *κ*; so that this word may fairly be compared with *κύριος*. Pott thinks (*Etymol. Forsch.* I. p. 131) that it is identical also with *ἥρωας*, on the analogy of *ἔκρυος*, Sanscrit *çvaçuras*, Latin *socerus*. In another place (I. p. 221) he makes *çûras* a compound *su=εὔ* and *viras*, which, however, we think quite unnecessary: we believe that *viras*, *çûras* are but modifications of the same word, and both connected with the Sanscrit root *vr̥* or *vā*, "to protect,"

modern German *Wehr*, *wehren* (above, pp. 301, 493). Further modifications are *varas*, subst. a "husband or bridegroom," adj. "excellent;" compar. *varián*, superl. *varisht'h'as*, and *urus*, "great;" with the latter of which we may compare *εὐρύς*, *οὐρα-νός* (§ 259), with the former *Ἄρης* (= *Ἑρῆς*), *Φαείων*, *Ἑρμῆς*, *Φαειτή*, *Ἑρσην* = *Ἑρ-σην*, Latin *Mâ-vor-t-s*, "man-protector," like *Ἀλ-Ἑρ-της*; conversely, the Oscan *Mâ-mers*, "man-killer." With these may also be compared the Erse, *fear*, "aman," Welsh *gŵr*, *wr*, "a man," *gwraig*, *wraig*, "a woman," Latin *virgo*, *virago*, Erse *frag*, German *Frau*: and the first of these words, *fear*, comes very near *ἦρως* (Prichard, *Eastern Origin of the Celt. Nations*, p. 66).

333 A similar connexion of the ideas "warrior," "husband," "man of rank," we find in the Sanscrit *naras*, *nr̥ś*, "a man," "a lord," "a husband;" Celtic *nêr*, "a lord," Greek *ἄ-νῆρ* (= *ἄ-νέρ-ς*). This word finds its fullest development in the old Latin or Sabine language. *Nero*, as a cognomen of the Sabine family of the Claudii, is familiar to every one; it signifies "a brave man," and its derivatives *neria*, *nerio*, *neriene*, *nerienes*, signify "valour," also the wife of Mars, as in the following passages quoted by Aulus Gellius (xiii. 22). Plautus (*Truculent.* ii. 6, 34):

Mars peregre adveniēns salutāt Nerienem uxorem suam.

Cn. Gellius (*Annal.* iii.): *Neria Martis te obsecro pacem dare, uti liceat nuptiis propriis et prosperis uti, quod de tui conjugis consilio contigit.* Licinius Imbrex (*in Næra Com.*):

*Nolo ego Næram te vocent, sed Nerienem:
Quum quidem Marti es in connubium data.*

Ennius (*Annal.* i.):

Nerienem Mavortis et Herclem.

It is well known that *ἄ-νῆρ*, as distinguished from *ἄνθρωπος*, invariably means "a brave man" or "a husband;" and to the latest period *ἄνδρες* was a complimentary address (see Valckenaer *ad Herod.* vii. 210).

Again we find the same combination in *πόσις*, *πότινα*, *πότινα*, *δεσ-πότης*, *δέσ-ποινα*, Latin *potes* (as *Dii potes*), *potentes*, *pot-sum* (*possum*), &c. Sanscrit *patis*, *patnī*, &c. (above, § 228).

334 The title *ἄναξ* does not seem to imply any thing beyond mere superiority, though it has a domestic as well as a political application: thus, we have in Homer *οἶκοιο ἄναξ* of the *pater familias* (*Odyss.* i. 397). It is probably, like *ἄν-θος*, connected with the preposition *ἀνά*. The simpler form is *ἄνα-κος* or *ἄνα-κ-ς*, preserved in Hesychius as an epithet of the Dioscuri—*ἄνακας*, τοὺς Διοσκόρους.—*ἀνάκειον*. τὸ Διοσκούριον—*ἀνάκειον*. τοῖν Διοσκόροις—and per-

haps Δεύας. τοὺς ἀνάκους (instead of ἀκάκους) θεούς. Μάγοι. The common form ἄνακτ-ς, gen. ἄνακτος, has the double pronominal ending: ἀνάκτωρ is a still longer form.

335 If ἄναξ is simply a formation from the preposition ἀνά, it may be compared with ὕβρις (ὑπέρ), "uppishness," ὑπέρφεν, ὑπερφυνῶς, ὑπερφιάλος (= ὑπερφύαλος, Buttmann, *Lexil.* II. p. 213), ὑπέροπλος, &c. Comp. ὑπεραντλος ὕβρις (Hemsterhuis *ad Lucian.* I. p. 341). In immediate connexion with ὕβρις, we constantly find κόρος. Sometimes κόρος is the parent of ὕβρις, as in Theognis, v. 153 (p. 7 Welcker):

τίκτει τοι κόρος ὕβριν ὅταν κακῷ ὄλβος ἔπηται
ἀνθρώπων καὶ ὅτῳ μὴ νόος ἄρτιος ᾗ.

v. 751 (p. 12 Welcker): ὑβρίξῃ πλούτῳ κεκορημένος. Diog. Laert. (I. 59), quoting Solon, says: τὸν μὲν κόρον τοῦ πλούτου γεννᾶσθαι, τὴν δ' ὕβριν ὑπὸ κόρον. Proclus (*in Cratyl.* p. 59 Boissonade): ὕβριν γὰρ φασιν (οἱ ποιηταὶ) τίκτει κόρος (quoted by Welcker, p. 93). Pythagoras (*apud Stobæum Serm.* xli. p. 247): πρῶτον τρυφὴν, ἔπειτα κόρον, εἶτα ὕβριν, μετὰ δὲ ταῦτα ὀλεθρον. Conversely, ὕβρις is the mother of κόρος. Pindar (*Olymp.* xiii. 10):

ἐθέλοντι δ' ἀλέξειν
Ἵβριν, Κόρον ματέρα θρασύμυθον.

(with which may be compared Solon, p. 88 Bach:

δήμου θ' ἡγεμόνων ἄδικος νόος, οἷσιν ἐτοῖμον
ὕβριος ἐκ μεγαλῆς ἄλγεα πολλὰ παθεῖν,
οὐ γὰρ ἐπίστανται κατέχεν κόρον).

Bacis (*apud Herodot.* viii. 77):

διὰ Δίκη σβέσσει κρατερὸν Κόρον, Ἵβριος υἱόν,
δαινὸν μαίμωνοντα, δοκεῦντ' ἀνὰ πάντα τίθεσθαι.

And in accordance with this genealogy we would emend a passage of Æschylus (*Agamemn.* 741 foll.), which the editors have regarded as hopelessly corrupt.

We read and arrange the strophe and the antistrophe as follows:

στρ. δ'. 1 φιλεῖ δὲ τίκτειν Ἵβρις μὲν παλαιὰ νεά-
2 ζουσάν ἐν κακοῖς βροτῶν
3 Ἵβριν, τότε ᾗ τόθ', ὅτε τὸ κύριον μόλῃ
4 νεά δὲ φύει Κόρον,
5 δαίμονά τε τὰν ἄμαχον, ἀπόλεμον,
6 ἀνίερρον Θράσος, μελαί-
7 να μελάθροισιν Ἄτα,
8 εἰδομένα τοκεῦσιν.

- ἀντ. δ'. 1 δίκαια δὲ λάμπει μὲν ἐν δυσκάπνοις δώμασιν,
 2 τὸ δ' ἐναΐσιμον τίει.
 3 τὰ χρυσόπαστα δ' ἐσθλὰ σὺν πίνῳ χερῶν
 4 παλιντρόποις ὄμμασι
 5 [δώματα] λιποῦσ', ὅσια προσέμολε,
 6 δύναιμι οὐ σέβουσα πλού-
 7 του παράσημον αἶνῳ·
 8 πᾶν δ' ἐπὶ τέρεμα νωμᾷ.

The meaning of the first lines is: "Old ὕβρις is wont to bring forth new ὕβρις, this new ὕβρις brings forth Κόρος and Θράσος, two black fates to houses, like their parents." Νεαρά φνέι κόρον was first adopted by Butler, who was guided by Wakefield's νεαρὸν φνέουσα κόρον; ὅτε for ὅταν was introduced by Klausen. The substitution of τὰν for τὸν in the fifth line is due to Hermann. It appears to us that ἀνίερον Θράσος is in apposition with τὰν ἀπόλεμον, ἔμαχον δαίμονα. For the duals at the end of the strophe compare Soph. *Antig.* 529:

τρέφων δὴ Ἄτα κάπαναστάσεις θρόνων.

In the antistrophe we have inserted δώματα, which was perhaps omitted in consequence of the similarity of the preceding ὄμμασι, and this would be a still easier corruption, if the last syllable of προσέμολε, which is due to Hermann, found its way into the space above, so that ὄμμασι λε and δώματα λι got confused.

Now this κόρος, which we see in such close connexion with ὕβρις, is in our opinion a word of cognate meaning. It is, we conceive, connected with κόρ-υ(θ)ς, κορ-υφή, &c. "the head or top of any thing." The idea of "satiety," which κόρος often conveys, is subordinate to that of "fulness," "up to the top," as appears from the well-known passage of Sophocles (*Æd. Tyr.* 874):

ὕβρις φντεύει τύραννον.
 ὕβρις, εἰ πολλῶν ὑπερπλησθῆ μάταν
 ἃ μὴ πίκαιρα, μηδὲ συμφέροντα,
 ἀκροτάταν εἰδαναβᾶσ' ἀπότομον
 ὥρουσεν εἰς ἀνάνκαν
 ἐνθ' οὐ ποδὶ χρησίμῳ
 χρεῖται.

The first line reminds us of Shakspeare, *Macbeth*, iv. sc. 3: "Boundless intemperance in nature is a tyranny."

We observe that χλιδή in v. 888 is a synonym of κόρος. Thus κόρος comes to have the sense of having got as far as one can go, consequently it suggests that fixedness, to which ὕβρις never attains till it has produced κόρος. This view of the case is confirmed by the

following passage of Plato (*Philebus*, p. 26): ὕβριν γὰρ πον καὶ ξύμ-
 πασαν πάντων πονηρίαν αὕτη κατιδοῦσα ἡ θεός, πέρας οὐδὲν
 οὔθ' ἡδονῶν οὔτε πλησμῶν ἐνὸν ἐν αὐτοῖς, νόμον καὶ τάξιν, πέ-
 ρας ἔχοντ', ἔθετο. It is from the sense of fixedness and limitation
 implied in κóρος that we derive the meaning "uncertain," "unsteady,"
 "wayward," "always changing its place," with which ἀκόρεστος is
 found in the dramatists. Thus Æschylus (*Agamemn.* 1304):

τὸ μὲν εὖ πράσσειν ἀκόρεστον ἔφν
 πᾶσι βροτοῖσι.

1461: φεῦ φεῦ κακὸν αἶνον ἀτη-
 ρᾶς τύχας ἀκορέστου.

972: μάλα γὰρ τοι τᾶς πολλᾶς ὑγίειας ἀκόρεστον τέρμα,
 in imitation of Solon (p. 80 Bach):

πλούτου δ' οὐδὲν τέρμα πεφασμένον ἀνδράσι κεῖται,
 οἱ γὰρ νῦν ἡμῶν πλείστον ἔχουσι βίον
 διπλάσιον σπεύδουσι· τίς ἂν κορέσειεν ἅπαντας;

(where we may remark by the way that in Solon's laws πεφασμένως
 stands for φανερώς; see Lysias in *Theomnest.* p. 117 [363]), Sophocles,
Œd. Col. 120:

ποῦ κυρεῖ ἐκτόπιος σνθεῖς ὁ πάντων
 ὁ πάντων ἀκορεστότατος;

In this last passage this epithet is applied to Œdipus whom the chorus
 cannot find; and they charge him with leaving the place where he was
 before from mere caprice—"Where," they ask, "is the most unsatisfied,
 most place-changing of men?" This interpretation is strikingly con-
 firmed by a very similar passage of the same poet, namely, that in the
Ajax (871 sqq.), where the Salaminian sailors complain that they can-
 not find the hero: "It is hard," they say somewhat peevishly, "that
 we with so much wandering about should not succeed in approaching
 him, but should fail to see where the fleeting man is" (ἀλλ' ἀμενηνὸν
 ἄνδρα μὴ λεύσσειν ὅπου). If ἀ-μεν-ηνός is derived from μένω, as is
 most probable, its application to the flitting shades of the dead would
 be doubly appropriate, and we have elsewhere (*Journal of Philology*,
 III. p. 209) quoted the words of our funeral service: "Man fleeth as a
 shadow, and never continueth in one stay," which exactly gives the
 meaning of ἀμενηνός, required by the passage in the *Ajax*. It is to
 be remarked that Pindar uses ἄκορος to signify "restless," "unceas-
 ing," "never stopping;" *Pyth.* IV. 202: εἰρεσία δ' ὑπεχώρησεν ταχεῖαν
 ἐκ παλάμων ἄκορος.

336 The outward resemblance of this κóρος to the similarly writ-
 ten members of the family, which we have discussed above (κύρ-ιος,

κοίq-ανος, &c.), is obvious. Let us examine if there be not also a connexion in meaning. That the idea of "a head" or "completion" is nearly connected with that of "king," "lord," or "master," cannot be denied; therefore in this sense of *κόq-ος* it may fairly be assigned to the same family. But what is the connexion between this word and *κόqος*, "a young man"? This again can be easily shown. The idea of "fulness," "growing up," enters into our conception of a tall youth, and this the Greek expresses very strongly. Thus *ἄδ-ρός* (connected with *ἄδινός*, Buttmann, *Levil.* i. p. 206) is used as an epithet alike of a young man, of a tree, of fire, of snow (Herod. iv. 31), of any thing in fact in which the idea of fulness, growth, or strength, is implied: *ἄδρωτής* is constantly found in connexion with *ἥβη* or *μένος* in Homer, and *ἄδρωσύνη* is used of the top-heaviness of ripe corn in Hesiod (*ἔορα καὶ ἡμέραι*, v. 471):

ἄδὲ κεν ἄδρωσύνη στάχνης νεύοιεν ἔραξε.

Again, *ἄνθος*—connected with *ἀνά, ἄνω, ἀνήνοθε* (Pott *Etymol. Forsch.* i. p. 211), and, if the derivation proposed above be the true one, with *ἄναξ*—is also used in connexion with *ἥβη*. Thus Pindar (*Pyth.* iv. 158, 281): *σὸν δ' ἄνθος ἥβας ἄρτι κυμαίνει*. The last word carries the metaphor only a little farther: a swelling like a wave, an excessive fulness even to overflowing, being also attributed to the lusty vigour of youth. Accordingly we have in the same ode of Pindar (170=318): *κεχλάδοντας ἥβα*. Now *κεχλάδοντας* is an irregular form of the perfect participle of *χλάζω*, or rather a new present formed from the perfect, according to a custom not very uncommon in Greek: in fact we have a reduplicated present *καχλάζω* as a synonym of *χλάζω*, which means "to swell, to be exuberant or full;" hence the rushing, loud-sounding noise of overflowing water is sometimes included in the notion of the word. In a dithyramb of Pindar (*Fragm.* 48) we have:

*σοὶ μὲν κατάρχειν,
μαῖτερ μεγάλα, πάρα ῥόμβοι κυμβάλων,
ἐν δὲ κεχλάδειν κρόταλα,*

where *κεχλάδειν* follows the analogy of *κεχλάδοντας*. Similarly in *Olymp.* ix. init. we have: *καλλίνικος ὁ τριπλόος κεχλαδῶς*, "the triple song of victory when it pours forth its loud full tones," and in the passage under consideration *κεχλάδοντας ἥβα*, "in all the exuberance of youth," "swelling with youthful strength." We do not agree with Buttmann (*Ausführl. Sprl.* ii. p. 255, note) in supposing that there is no connexion between *κεχλαδῶς* and *καχλάζω*; the use of *καχλάζουσα*, of a cup filled with *mousseux* wine, sparkling, bubbling, and running over (Pindar, *Olymp.* vii. init.: *φιάλαν ἔνδον ἀμπέλου καχλάζουσαν δρόσῳ*) shows that the words have precisely the same force, for *κεχλά-*

δουσαν or κεχλαδυνῖαν might have been used here. There is no doubt, however, that it is also connected with χλῆδος, χλιδή (a perfect synonym of κόρος, *Ced. Tyr.* 888, and above, § 335), and χλιδάω, and thus χλιδῶσα μολπά is used, like καλλίνικος κεχλαδῶς, in Pindar (*Olymp.* xi. 84=100). In precisely the same manner σφριγᾶν and ὄργᾶν are used as synonyms of ἀκμάζειν (Ruhnken, *ad Timæum*, p. 244). It is remarkable that ὄργᾶν, which thus conveys the sense of fulness implied in κόρος, also, under the forms *regere* (ὀ-ρέγειν), *rex*, Sanscrit *rajas*, corresponds to the political meaning of κύριος, κοίρανος, &c. The same metaphor, with respect to the exuberance of youth, is found in the Latin language: thus Quintilian (*Instit. Orator.* xi. 3, § 28): *Illud non sine causa est ab omnibus præceptum ut parcatur maxime voci in illo a pueritia in adolescentiam transitu, quia naturaliter impeditur, non, ut arbitror, propter calorem, quod quidam putaverunt; nam est major alias; sed propter humorem potius; nam hoc ætas illa turgescit.*

337 We see thus how the ideas of fulness, height, and completeness, are connected in the Greek language with that of political superiority. We should be perfectly authorized, then, in connecting ἄναξ with ἄνθος and ἀνά, as far as the meaning is concerned, even though the words were not etymologically related to one another. We believe, however, as we stated above, that they spring from a common origin. It is clear, indeed, that ἄναξ was a digammated word (Dawes, *Miscell. Crit.* pp. 144 sqq.), whereas it does not appear that ἀνά was ever digammated. But this does not create any real difficulty, for the element α, which forms the first part of ἀ-νά, is only the second pronominal stem under the form *Ἔα* (§ 183); so that *Ἔάναξ* is connected with *Ἔανά*, an older and more genuine form of the preposition. There are traces of the digamma in the form Ἰωνθος for ἄνθος. At any rate, we cannot agree with those who connect *Ἔάναξ* with *König*, a word with regard to which we rather adopt the opinion of Thierry. It appears that *König*, more anciently *Koning*, was the name of any person under authority. Thus the converted centurion bears this name,—*ein Koning gieiscot iz in war* (Otfrid, *Lib.* ii). Alfred applies the term *Cyning* to Caesar as general, to Brutus as the head of a party, and to Antony as consul; sometimes he designates the particular office of consul by the compound *Gear-Cyning*, "King for a year." In the Danish language a chief of pirates was called *Sie-Konong*, the leader of an army *Her-Konong*, and so forth. In the Saxon language we also find *Ober-Cyning*, *Under-Cyning*, *Half-Cyning*. In fact the word is merely the participle of the verb *Können* or *Kennen*, for they were originally iden-

tical (Graff, *Sprsch.* iv. 408), and denotes a person who *kens*, or *can*, who has superior knowledge or superior power*.

338 The original meaning of our English word "Lord" is precisely similar to that which we have endeavoured to point out in several of those Greek names significant of rank. Horne Tooke says (*Diversions of Purley*, ii. pp. 155 foll.) that it was originally written *Loverd* or *Hlaford*, that it is compounded of the participle *hlaf*, from *hlifian*, "to lift," and of the word *Ord*, *ortus*, "source," "origin," "birth," and that it consequently signifies *High-born*, or of an *exalted origin*. That he is right in connecting this word with a verb signifying "to lift up," is sufficiently clear. Similarly, "Lady" is derived from *Hlafdig*, which signifies "lofty," i. e. "raised" or "exalted;" it is written *levedi* in an old English MS. in the Cambridge Library (see *Gentleman's Mag.* Dec. 1838, pp. 619 sqq.). We entertain some doubt, however, as to the supposition, that the termination of "Lord" refers to "birth." We would rather connect it with A. S. *Ord*, O. H. G. *Ort*, "a place," and thus *Hlaford* will mean "a person in high places," perhaps in reference to the *heóðe* or "dais" in the dining-hall, where the nobles sat (see *Beowulf*, v. 804 Kemble). This last name is also a general designation of height; it means any thing elevated, e. g. a shore, as in our names *Clay-hithe*, *Queen-hithe*, applied to the banks of a river where they rise a little.

The German words *Tugend*, *taugen*, signifying "virtue," or "goodness" in general, seem to have had originally a political meaning, like the Greek *καλοκάγαθός*. Thus in *Beowulf* (v. 716 Kemble) we have *cufe he duguðe þeáw*, "he knew the manners of the court;" where *duguðe*, obviously connected with *Tugend*, means "the better part of his followers," "the elders," the *γερονσία*.

339 (3) *Ἐντελέχεια*. All the questions which have been raised with regard to the celebrated Aristotelian word *ἐντελέχεια*, and all the difficulty which it has caused to philosophers (see Trendelenburg, *ad Aristot. de Animâ*, pp. 319 sqq.), have been occasioned by an inability to discriminate between this and the compound *ἐνδε-*

* "Cette variété d'applications du même mot n'étonnera point quand on saura que ce titre *Koning*, n'est probablement que le participe actif d'un verbe qui signifie *savoir* ou *pouvoir*, que par conséquent il ne signifie, lui-même, rien autre chose qu'un homme habile, ou *capable*, à qui les autres obéissent par la conviction de son habileté reconnue" (Thierry. *Dix ans d'Etudes Historiques*, p. 248. *Comp. Lettres sur l'Histoire de France*, pp. 62—73). "In such Acknowledged Strongest (well-named King, *Kön-ning*, Can-ning, or Man that was Able) what a symbol shone now for them—significant with the destinies of the world" (Carlyle, *French Revolution*, i. p. 14).

λέχεια, which so nearly resembles it in sound. It will be worth while, then, to explain these words once for all.

340 The meaning of ἐντελέχεια may be derived without much difficulty from Aristotle himself. The philosopher is in the constant habit of using a double antithesis to the word δύναμις, which he opposes both to ἐντελέχεια and to ἐνέργεια. The δύναμις in this opposition corresponds to ὕλη, the material out of which any thing is immediately made: the ἐντελέχεια to the εἶδος or form which constitutes the definition of the thing. "Substance itself," says Aristotle, "is reckoned a sort of entity, and in this we discriminate, 1st, the material, which by itself does not constitute an individual; 2nd, the shape and form, by which the individuality is determined; 3rd, a compound of the two. Now the material is a δύναμις, but the form an ἐντελέχεια, and that in two ways, either as science (ἐπιστήμη) or as contemplation (τὸ θεωρεῖν)" (*de Animâ*, II. 1, § 2): and shortly afterwards (§ 4), he says "the soul is a substance, as the form of a natural body alive *δυνάμει*; but the substance is an ἐντελέχεια; therefore the soul is the ἐντελέχεια of such a body. But ἐντελέχεια is predicated in two ways, as science and as contemplation; accordingly, it is clear that the soul is an ἐντελέχεια in the same way as science, for sleeping and waking presuppose the soul, and waking is analogous to contemplation, but sleep to the having and not exerting" (i. e. to science, τὸ γὰρ ἡρεμῆσαι καὶ στήναι τὴν διάνοιαν ἐπίστασθαι καὶ φρονεῖν λεγόμεθα, *Phys.* VII. 3). "Wherefore the soul is the primary ἐντελέχεια of a natural body *δυνάμει* alive." The body is a δύναμις; it contains the outward conditions necessary to the life of the soul: the soul is the ἐντελέχεια of the body; it is that which makes the body perform its functions; so sight is the ἐντελέχεια of the eye, because it is its perfection and consummation. He calls the soul a primary ἐντελέχεια, because it corresponds to science, the first of the two kinds of ἐντελέχεια. We must not consider the opposition of δύναμις and ἐντελέχεια as equivalent to that of matter and form; it is merely analogous to it; the ἐντελέχεια is not a form as something distinct from matter and adscititious; it is the acting and efficient principle which makes the thing what it is, which individualizes it—τὸ γὰρ δυνάμει ὄν καὶ μὴ ἐντελεχεία, ἀόριστόν ἐστιν (*Metaphys.* III. 4).

341 We adopt in our every-day conversation the Aristotelian distinction between δύναμις and ἐνέργεια. The schoolmen, from whose barbarous Latin we have borrowed many of our common words, used to translate δυνάμει by *potentiâ*, or *virtute*, or *virtualiter*; ἐνεργείᾳ by *actu*, or *actualiter*, which the French have adopted as *virtuellement*,

actuellement, and we oppose that which exists “virtually” or “potentially” to that which “actually” is. Aristotle thus defines ἐνέργεια (*Metaphys.* viii. 6, p. 1048 Bekk.): “ἐνέργεια supposes the existence of a thing, but not in that way in which we talk of its existing δυνάμει. We talk of a thing existing δυνάμει, when, for instance, we say that the statue of Hermes is in the wood, and the half in the whole, because it can be deducted, and that the person who does not speculate is scientific, provided he has the power of speculation: but as for that which is ἐνεργείᾳ (now our meaning is clear from an induction of particulars, and it is not necessary to seek a definition of everything, but we must also take analogy into the account), it stands related to the other as that which builds to that which is capable of building, as waking to sleeping, as seeing to having the eyes shut, but being able to see, as that which is separated from matter to the material, as that which is worked out to that which is not. Of these contrasts let us call the former ἐνέργεια, and the latter τὸ δυνάτον.” We learn from this that the opposition of δύνανται to ἐνέργεια stands much on the same footing with that of the same word to ἐντελέχεια.

342 We are not, however, to suppose that ἐντελέχεια and ἐνέργεια are synonyms, though it must be confessed that the distinction between them is not always strongly marked. The word ἐνέργεια signifies an acting, exertion, or operation. Thus, in the celebrated definition of the *summum bonum* in the *Ethics* (i. 7, § 14) it is said to be an operation, exertion, or acting of the soul, according to virtue (τὸ ἀνθρώπινον ἀγαθὸν ψυχῆς ἐνέργεια γίνεται κατ’ ἀρετήν)*. Now

* Sir W. Hamilton says (*Lectures on Metaphysics*, i. p. 181): “power, faculty, capacity, disposition, habit, are all different expressions for potential or possible existence; act, operation, energy, for actual or present existence.” Sir Alexander Grant has ably discussed the meaning of ἐνέργεια as applied to the definition of happiness (*Aristotle’s Ethics*, Vol. i. pp. 181—201). After examining the difference between δύνανται, ἔστις and ἐνέργεια, and maintaining that the ψυχῆς ἐνέργεια κατ’ ἀρετήν must mean a deep and vivid consciousness of life according to the law of virtue, he says (p. 195): “life, according to his (Aristotle’s) philosophy, is no means to any thing ulterior; in the words of Goethe, *life itself is the end of life*. The very use of the term ἐνέργεια, as part of the definition of happiness, shows, as Aristotle tells us, that he regards the chief good as nothing external to man, but as existing in man and for man, — existing in the evocation, the vividness, the fruition, of man’s own power (*Eth. Nic.* i. 8, § 3). Let that be called out into *actuality* which is potential or latent in man, and happiness is the result.” And he then quotes the following passages, in which ἐνέργεια may be rendered by consciousness, conscious state or mood of mind: *Eth. Nic.* i. 10, § 2, § 9, § 15; vii. 14, § 8; ix. 9, § 5.

he says at the very beginning of the same work, that "this *summum bonum* is an end (τέλος); but there is a difference between ends, for some are operations (ἐνέργειαι), and others are certain works (ἔργα) besides these operations; and in cases where there are any ends collateral to the actions (πράξεις), in these cases the works (ἔργα) are better than the operations (ἐνέργειαι); still it does not follow that an operation, which terminates in itself and produces no ἔργον, should be inferior to one that does, in other words, that a *πρακτικὴ ἐνέργεια* should rank lower than a *ποιητικὴ ἐνέργεια*." From this it appears that the ἐνέργεια is a mere operation or act, whereas the ἐντελέχεια is never spoken of as an act, but as a state ensuing upon an act: thus, Aristotle says (*Phys.* III. 3) that motion is in that which is moved, for it is the ἐντελέχεια of that which is moved, and is produced by the moving force, and the ἐνέργεια of the moving force is the same. Now the passage from the δύναμις to the ἐντελέχεια consists in motion, which is a sort of imperfect ἐνέργεια (ἢ τε κίνησις ἐνέργεια μὲν τις εἶναι δοκεῖ, ἀτελής δέ. *Phys.* III. 2), and again, motion is the ἐντελέχεια of that which virtually exists, so far as such a thing can be called an ἐντελέχεια (*Phys.* III. 2), and motion differs from ἐνέργεια in this, that the former implies change, the latter continuance (*Metaphys.* VIII. 6): therefore, ἐνέργεια is not ἐντελέχεια, but only tends to it, as Aristotle distinctly explains it from the primary meaning of the two words: τὸ γὰρ ἔργον τέλος, ἡ δὲ ἐνέργεια τὸ ἔργον. διὸ καὶ τοῦνομα ἐνέργεια λέγεται κατὰ τὸ ἔργον καὶ συντείνει πρὸς τὴν ἐντελέχειαν (*Metaphys.* VIII. 8, p. 1050 Bekk.), that is, the work (ἔργον) being the end (τέλος), and being implied in the word ἐν-ἐργ-εια, this last may be considered as tending to the ἐν-τελ-έχ-εια, in which the τέλος is contained*. Again, he says (*Metaphys.* VIII. 3, p. 1047): ἐλήλυθε δ' ἡ ἐνέργεια τοῦνομα, ἡ πρὸς τὴν ἐντελέχειαν συντεθειμένη καὶ ἐπὶ τὰ ἄλλα, ἐκ τῶν κινήσεων μάλιστα δοκεῖ γὰρ ἡ ἐνέργεια μάλιστα ἡ κίνησις εἶναι. διὸ καὶ τοῖς μὴ οὖσιν οὐκ ἀποδιδόασιν τὸ κινεῖσθαι, ἄλλας δὲ

* On the term ἐντελέχεια Sir A. Grant says (*Arist. Eth.* I. p. 184): "since δύναμις has the double meaning of *possibility of existence* as well as *capacity of action*, there arise the double contrast of action opposed to the capacity for action; actual existence opposed to possible existence or potentiality. To express accurately this latter opposition Aristotle seems to have introduced the term ἐντελέχεια, of which the most natural account is, that it is a compound of ἐν τέλει ἔχειν, *being the state of perfection*, ἐντελεχής being constructed on the analogy of νουνεχής. But in fact this distinction between ἐντελέχεια and ἐνέργεια (cf. *Metaph.* VIII. I, § 2) is not maintained. The former word is of comparatively rare occurrence, while we find everywhere throughout Aristotle ἐνέργεια, as he says, πρὸς ἐντελέχειαν συντεθειμένη, mixed up with the idea of complete existence. It is contrasted with δύναμις, sometimes as implying motion, sometimes as *form opposed to matter*."

τινας κατηγορίας, οἷον διανοητὰ καὶ ἐπιθυμητὰ εἶναι τὰ μὴ ὄντα, κινούμενα δ' οὐ. τοῦτο δὲ ὅτι οὐκ ὄντα ἐνεργεία ἐσονῶια ἐνεργεία. τῶν γὰρ μὴ ὄντων ἕνα δυνάμει ἐστίν· οὐκ ἔστι δέ, ὅτι οὐκ ἐντελεχείᾳ ἐστίν*." "The name ἐνεργεία, i. e. operation or action, which is joined to ἐντελέχεια, and occurs also in other combinations, is derived principally from motions; for motion and action are generally identified. Wherefore motion is not attributed to nonentities, but something else is predicated of them, for instance, that they are conceivable or desirable, but not that they are moved. And the reason is, that if we attributed *motion* to them, we should attribute *action* to things which do not *actually* exist. Some nonentities do indeed exist *virtually* or *potentially*, but not *actually*, for they do not exist ἐντελεχείᾳ." Taking therefore the definitions and illustrations which Aristotle has given of this word of his own coinage, we see that he means by it "an organizing force," and that the only English term which can be accepted as an equivalent for the compound is the word "completeness" (*Hist. of Greek Lit.* II. p. 281).

343 From all this it clearly appears that Aristotle derived ἐντελεχεία from ἐν, τέλος, and ἔχειν, on the analogy of νουνεχής, &c., and that he meant by it the acting and efficient principle of all those things which exist potentially (δυνάμει) and may be otherwise; that is to say, it is their absolute definition—ἔτι τοῦ δυνάμει ὄντος λόγος ἡ ἐντελεχεία (*de Anim.* II. 4, § 4), and τὸ δὲ τί ἦν εἶναι οὐκ ἔχει ὕλην τὸ προῶτον· ἐντελεχεία γάρ (*Metaphys.* XII. 8)†; whereas ἐνεργεία is the act of that which cannot be otherwise (*de Anim.* III. 7); it is a kind of motion tending to ἐντελέχεια, but not attaining to it, except in those cases in which the τέλος is the ἐνεργεία itself. We must not overlook the distinction between ἐνεργεία and ἔξις, which are also opposed to one another, not, however, as δύναμις is to ἐνέργεια, for ἔξις is much nearer to ἐνεργεία than to δύναμις. Actions (ἐνεργεῖαι) proceed from, and return to, the universal action (ἔξις) which is the origin and end of all action: thus, a brave action pro-

* On this passage Bonitz writes as follows, in his edition of the *Metaphysica*, p. 387: "ἐντελέχεια, ut descendit ab adjectivo ἐντελεχής, i. e. *plenus, perfectus*, perfectionem rei significat; ἐνεργεία vero derivatum a *v. ἐνεργεῖν*, eam actionem et mutationem, qua quid ex mera possibilitate ad plenam perducitur essentiam. Quare, ἐνεργεῖαν suum et peculiarem locum habere dicit ubi agitur de mutatione et motu, eandemque dicit pertinere et tendere (συντείνειν, συντεθεῖσθαι) ad ἐντελέχειαν, perfectum rei statum, qui inde conficiatur. Sed licet alterum proprie *viam*, alterum *finem viæ* significet, tamen hæc duo ita inter se coherant, ut facile appareat cur sæpissime nullo usurpentur discrimine."

† See Michelet, *de la Métaphysique d'Aristote* (Paris, 1836), pp. 165, 294.

ceeds from the habit of bravery (ἔξις, i. e. ἀνδρεία) and bravery is the end (τέλος) sought by the brave man (Arist. *Eth.* vii. 10): thus too, αἰσθησις is a ἔξις, but κίνησις, as we have before shown, is an ἐνέργεια—ἡ μὲν γὰρ αἰσθησις ἔξις, ἡ δὲ κίνησις ἐνέργεια (*Topica*, iv, 5, p. 125 Bekker). To return, then, to the point from which we started, the soul is the ἐντελέχεια and not the ἐνέργεια of the body, because the soul is incapable of motion—ἐν τι τῶν ἀνδυνάτων τὸ ὑπάρχειν ψυχῇ κίνησιν (*de Anima*, i. 3, § 1).

344 We trust that the meaning of this Aristotelian term is now established, from the writings of the philosopher; so that Hermolaus Barbarus would have done better if, instead of consulting the Evil Being about the meaning of the word, according to the absurd story told by Crinitus (*de Honesta Disciplina*, Lib. vi. c. 2), he had been content to look through his Aristotle. We now proceed to show, notwithstanding the contrary opinion of some great Greek scholars, including Cicero, that ἐντελέχεια is, etymologically as well as in signification, totally distinct from the older compound ἐνδελέχεια. It is remarkable that Cicero, who was aware that the word was coined by Aristotle, should have given a translation of it applying exactly to the older word, which he must have met with in his Plato. He says (*Tusculan. Disput.* i. 10): *Aristoteles,—quum quatuor nota illa genera principiorum esset complexus, e quibus omnia orirentur, quintam quandam naturam censet esse, e qua sit mens. Quintum genus adhibet vacans nomine; et sic ipsum animum ἐντελέχειαν appellat novo nomine, quasi quandam continuatam motionem et perennem.* Now the word ἐνδελεχής does signify *perennis*, and ἐνδελέχεια implies continuance and duration, as appears from the following passages, some of which are adduced by Näke (*in Chærilum*, p. 177). Cherilus (p. 169 Näke):

πέτρην κοιλάνει θανὶς ὕδατος ἐντελεχείῃ (read ἐνδελεχείῃ).

Euripides (*Perithous apud Valcken. Diatrib.* p. 39):

ἄκριτος δ' ἄστρων
ὄχλος ἐνδελεχῶς ἀμφιχορεύει.

Crobylus (*apud Athenæum*, p. 429 D, repeated p. 443 F):

τὸ δ' ἐνδελεχῶς μεθύειν τίν' ἡδονὴν ἔχει;

Diodorus (*apud Athenæum*, p. 431 D):

εἰ τὸ παρ' ἕκαστον ἐνδελεχῶς ποτήριον
πίνειν τὸ λοιπὸν τοὺς λογισμοὺς αὐξάνει.

Plato (*Legg.* iv. p. 717 E): μνήμην ἐνδελεχῇ παροχόμενον. (*Tim.* p. 43 c): μετὰ τοῦ ῥέοντος ἐνδελεχῶς ὀχετοῦ. (p. 58 c): τὴν αἰὲ κίνησιν

τούτων οὖσαν ἑσομένην τε ἐνδελεχῶς παρέχεται, exactly Cicero's *continuatam motionem et perennem*. (*Respubl.* vii. 539 D): ἀρκεῖ δὴ ἐπὶ λόγων μεταλήψει μείναι ἐνδελεχῶς καὶ ξυντόνως μηδὲν ἄλλο πράττοντι. From which passages of Plato, it is quite certain that we ought to read in *Legg.* x. p. 905 E: ἄρχοντας μὲν ἀναγκαῖόν που γίγνεσθαι τοὺς γε διοικήσοντας τὸν ἅπαντα ἐνδελεχῶς οὐρανόν. Besides these passages, we have in the lexicographers the following notices; *Bekker. Anecdot.* p. 251, 24: ἐνδελεχεσάτης· συνεχεσάτης καὶ ἀδιαλείπτου; Hesych.: ἐνδελεχεῖ· πυκνάζει, Δάκωνες (where the last word, as Ruhnken observes in the *auctarium*, belongs to the gloss ἐνδεκαδίκος); ἐνδελεχισμός· ἐπιμονή (on which Toup, Vol. iv. p. 260, quotes Josephus, xi. 4, p. 555: ἦγαγον δὲ καὶ τὴν σκηνοπηγίαν κατ' ἐκείνον τὸν καιρὸν,—καὶ τοὺς καλουμένους ἐνδελεχισμούς); ἐνδελεχῶς· ἀδιαλείπτως, συνεχῶς, ἐπιμονῶς. And Näke quotes from Basilius: τὸ γὰρ ἐνδελεχὲς τὸ πυκνὸν καὶ συνεχές. From all this it is clear that ἐνδελεχής, ἐνδελέχεια, &c., were in Cicero's thoughts when he gave the translation of ἐντελέχεια, which we have quoted, and that he probably thought the two words were identical. In this he is borne out by only two authorities; the first is a joke of Lucian's, who makes the letter δ complain that τ has robbed him of his place in ἐνδελέχεια: ἀκούετε φωνήεντα δικασταί, τοῦ μὲν δ λέγοντος, ἀφεί-λετό μου τὴν ἐνδελέχειαν, ἐντελέχειαν ἀξιοῦν λέγεσθαι παρὰ πάντας τοὺς νόμους (*Judicium Vocalium*, p. 95 Hemsterh.); the other is a gloss of Gregorius of Corinth, who says (p. 155) that the Attics write ἐντελέχεια for ἐνδελέχεια. But these two authorities only prove that the Aristotelian word had become more common than the older compound, not that it was synonymous with it or had superseded it, for we find the older word in the Septuagint and in Josephus. The earlier scholars, however, were quite misled by Cicero: Politian (*Miscell.* cap. 1) and Andreas Schottus (*Tull. Quæst.* iv. 12) tried to justify his interpretation; Scaliger thought the only difference between the two words was one of pronunciation, probably like that between ἔντος and ἔνδον: in fact, it was an open question at the revival of letters how the word ought to be written. Rabelais, with his usual learning and discrimination, saw that in Aristotle, at all events, the proper orthography was ἐντελέχεια. In the chapter headed *Comment nous arrivâmes au royaume de la Quinte Essence, nommée Entelechie* (Lib. v. ch. 19), he says: *Aristoteles, prime homme, et paragon de toute philosophie, feut parrain de nostre dame royne: il, tresbien et proprement, la nomma Entelechie. Entelechie est son vrai nom—qui aultrement la nomme erre par tout le ciel.* Yet, notwithstanding this denunciation, some, even of modern scholars, have thought that the words ἐντελέχεια and ἐνδελέχεια were

the same. Such appears to have been the opinion of Hemsterhuis, and a living scholar has endeavoured to establish their equivalence by etymology. Döderlein asserts (*Lat. Synonymie und Etymol.* i. p. 22) on the analogy of *creber, celebrer*; κρύπτω, καλύπτω; φράσσω, φυλάσσω; *creresco, glisco*; &c., "that ἐντελέχεια is only another pronunciation of ἐντρέχεια, the Platonic expression for *solertia*, and he agrees with Hemsterhuis (*ad Lucian.* Tom. i. p. 95) in thinking that Greg. Cor. p. 155, has rightly explained ἐνδελέχεια as only a dialectical variety, of which perhaps there is some vestige in τρέχειν and δραμεῖν." In the first place, we believe there is no such word as ἐντρέχεια in Plato, and the adjective ἐντρεχής, which occurs only once (*Resp.* vii. p. 537 A), does not, in the slightest degree, approximate to the meaning either of ἐνδελέχεια or of ἐντελέχεια: in the latter, the idea of motion is expressly excluded by Aristotle. And, in the second place, even if the sense did not guide us to a discrimination between these two words, the etymology would. Aristotle himself has hinted the derivation of his own coinage ἐντελέχεια from ἐντελής and ἔχειν, and ἐνδελεχής is, without doubt, a compound of ἐν with δολιχός, an adjective used, indeed, to signify length in distance, but more frequently applicable to express length in duration, as δολιχὴ νόσος, δολιχὸς πλόος, &c., and δολιχόν is used as an adverb to signify simply continuance and length of time, as in Homer, *Iliad* x. 52:

ἔργα δ' ἔρεξ' ὅσα φημι μελήσεμεν Ἀργείοισι
δηθά τε καὶ δολιχόν.

So that in meaning it is very near akin to ἐνδελεχής. With regard to the form of the compound, it may be observed that the termination is regularly altered from -ος to -ης in such words; thus, from γένος we have ἐγγενής; φίλος, προσφιλής; καλός, πεπικαλλής; μακρός, εὐμηκής, &c., not as grammarians say, because it has passed through a substantive in -ος, -εος, but by the common addition of the element -γα. The change from ο to ε, in the first syllable of the adjective, is due to the greater weight of ἐνδελεχής (above, § 222). The element of δολιχός is found in all the languages of the Indo-Germanic family, and may be detected also in the Hebrew חָיָה (above, § 209). In Sanscrit, it appears as the root *dr̥ih*, "to grow," adjective *dirgha*, "long," Zend *darega*, Behistun *daraga* (Rawlinson, *As. Soc.* xi. 1, p. 188), Persian *dīra*, Slavonic *dolǫŭ*, Bohemian *dlauihy*, Polish *dlugi*, Servian *dyg*, Lithuanian *ilga*, Lettish *ilg*, old Prussian *ilga*, and, probably, by dissimilation, the Latin *longus*, Gothic *laggs*, German *lang*, English *long*. Just in the same way the adverb τῆλε, which appears in the different cases of a last noun, τηλοῦ, τηλυῖ, τηλόθι, τηλοῖ, τηλόθεν, and indicates extent or distance, should be connected with the root of θάλλω,

ἀτάλλω, ἀτιτάλλω, τηλεθάω, all denoting growth and cultivation. The Æolic form of the adverb is πῆλυι (Ahrens, *Dial. Æol.* 41), and this, on the analogy of τέσσαρες, πέντες, &c., points to a combined articulation of guttural and labial in the original form (§ 121), so that we may recognise another representative of the same root in the Sanscr. *phala*, "fruit," in φλόος, *flos*, *flōjan*, φύλλον, *folium*, "bloom," &c. There can be no doubt, we think, that Döderlein is right in referring the much disputed adjective τηλύγετος rather to the primary meaning of the verb θάλλω, than to the secondary signification of the adverb τηλοῦ (*Commentatio de vocabulo τηλύγετος*, Erlang. 1825; *Homerisches Glossarium*, Erlang. 1850, no. 351). All the ancient and original passages, in which this word is found, accord best with the sense "blooming in youth," "delicately nursed or cherished," "childlike." The meaning and etymology together are given in the lines (*Il.* ix. 255): τίσω δέ μιν ἴσον Ὀρέστη, ὅς μοι τηλύγετος τρέφεται θαλήῃ ἐνὶ πολλῇ. And that it may signify "childlike," "childish," "babyish," in a reproachful sense, is clear from *Il.* xiii. 472: ἀλλ' οὐκ ἴδομεν ἡὰ φόβος λάβε, τηλύγετον ὦς. The termination -γετος, as Döderlein has shown, merely denotes the nature or constitution (Hesych. s. v. βαρυγέτας· βάρος μὲν ἔχοντας, -γετας δὲ ὄντας. *Id.* s. v. τανυγέταις πύλαις· ταῖς μεγάλαις), as in τालθύβιος. We have the same reference to childhood and childish sports in ἀταλός and its derivative ἀτάλλω; compare Hesiod, *Op. et D.* 130: παῖς παρὰ μητέρι κεδνῇ ἐτρέφειτ' ἀτάλλων. *Theog.* 989: παῖδ' ἀταλὰ φρονέοντα. *Hom. Il.* xviii. 567: παρθενικαὶ δὲ καὶ ἡῖθεοι ἀταλὰ φρονέοντες. vi. 400: παῖδ' ἐπὶ κόλπον ἔχουσ' ἀταλόφρονα, νήπιον αὐτως. *Pind. Nem.* vii. 90: ἀμφέπων ἀταλὸν θυμὸν πατρί. *Sop. Aj.* 556: τέως δὲ κούφοις πνεύμασιν βόσκου, νέαν ψυχὴν ἀτάλλων μητρὶ τῇδε χαρμονῇν. *Hesych.*: ἀτάματα· παίγνια. And ἀτιτάλλω is a synonym of τρέφω, "I nourish or increase in the way of growth." *Il.* v. 271: τοὺς μὲν τέσσαρας αὐτὸς ἔχων ἀτίταλλ' ἐπὶ φάτνῃ. xxiv. 60: ἦν ἐγὼ αὐτῇ θρέψα τε καὶ ἀτίτηλα. *Od.* xviii. 323: παῖδα δὲ ὥς ἀτίταλλε, δίδου δ' ἄρ' ἀθύρματα θυμῷ. With reference then to the idea of size or extent indicated by δολιχός and τηλοῦ, we may compare τρόφι and τραφερός, derived from τρέφω; for τραφερὴ κέλευθος, *Apoll. Rhod.* ii. 545, is exactly equivalent to δολίχη κέλευθος, *Hom. Od.* iv. 493. Pott suggests (*Etym. Forsch.* i. 87) that *in-dulgere* belongs to the root of δολιχός, with the original signification of *laxius* or *longius reddere, remittere*, just as *languere* seems to be connected with *longus*, and we admit the derivation as at least probable: the meaning to which he refers seems to be found in *Virgil, Georgic.* ii. 276:

*Sin tumulis acclive solum collesque supinos,
Indulge ordinibus.*

and in the preface of Aulus Gellius: *Animus, interstitio negotiorum aliqua data, laxari indulgerique potuisset*. The Sanscrit, Zend, and Persian forms approach nearly to the Greek *δόρυ, δοῦς*, in which some meaning of growth and length is obviously contained. The Lettish verb *ilgt*, "to delay," also belongs to this class: also, the Anglo-Saxon *telg*, "a plant," the Gothic *tulgjan*, "to strengthen," and the Latin *largus* (Pott, *Etym. Forsch.* I. p. 251). The idea of prolongation and continuance, which is conveyed by *ἐνδελεχής*, and with which this etymology entirely accords, is directly opposed to the notion of antecedent completeness suggested by *ἐντελέχεια*. As we have seen above (§ 343), the *ἐντελέχεια* belongs to the same class of definitions with the *τὸ τί ἦν εἶναι*, which, being a *πρώτη οὐσία* or abstraction, precedes the actual or concrete existence of the thing, and carries us back by inference to what it was (§ 192): *ὥστε τὸ τί ἦν εἶναι ἐστὶν ὅσων ὁ λόγος ἐστὶν ὁρισμός* (Aristot. *Metaphys.* VI. 4, § 9). Accordingly, the words in question stand opposed in much the same way as if they were different predications of tense; and while *ἐνδελεχής* points to the *present* and the *future* (Plat. *Tim.* 58 c, quoted above), which imply continuous motion, *ἐντελέχεια* is an expression of the *præteritum ac perfectum tempus*, and belongs to the category of the immovable.

BOOK IV.

THE VERB.



THE
NEW CRATYLUS.

BOOK IV.

THE VERB.

CHAPTER I.

THE PERSON-ENDINGS.

345 Original comprehensiveness of the verb. 346 Causes which led to the mutilation of the affixes. 347 The person-endings are objective cases of the personal pronouns. 348 Differences of voice are only different cases of the pronominal affix. 349 A. *Primary forms.* 1st person singular. Reasons for believing that verbs in *-μι* are older than verbs in *-ω*. 350 Successive mutilations of *-μι*. Quantity of the original penultima. 351 In the active, the person-ending represents the instrumental or ablative case. 352 In the middle, it represents the locative. 353 2nd person singular. Usual form in *-σ-*. The by-form is *-θ-*, not *-σ-θ-*. 354 Evanescence of the characteristic of this person. 355 3rd person singular. Active in *-τι*, *-τω*: middle in *-ται*, *-την*. 356 1st person plural. Active *-μεσ* for *-με-σι*. 357 Middle *-μεθα*, *-μεθεν*, for *-μεθαι*, *-μεθην*. 358 2nd person plural. Active *-τε* for *-τες*: middle *-σθε* for *-σθαι* and *-σθην*. 359 3rd person plural. Difficulties occasioned by the dual. 360 Plural in *-ντι* and *-νται*. Explanation of *-ᾱσι*. 361 Origin of *ντ*. 362 B. *Secondary forms.* Active suffixes. Explanation of *-σαν*. 363 Middle suffixes. They are not reduplications. 364 Table of existing forms. 365 Latin person-endings. Difficulties of the passive forms. The second persons. Are participial predications without a copula allowable in Greek? 366 Influence of the weight of the person-endings.

345 **T**HOSE students, whose notions of the nature of a verb are derived from the appearance of that part of speech in our own and indeed in most modern languages, will not be able to understand very well the meaning of the term as applied in the grammars of the ancient languages. A verb in English can only express the copula or the copula and predicate of a sentence: it can never contain the subject; in other words,

no English verb can really be used *impersonally*, as the grammarians say, except in such obsolete phrases as *me-thinketh*, *me-seems*, &c. But in the ancient languages, verbs are often found in the third person without any subject or nominative case expressed: and unless some particular emphasis is required, the nominative of the first and second persons is regularly omitted; so that the whole logical proposition may be included in a single word.

346 The explanation of this follows from what we have said of the substitution of prepositions for case-endings, &c.; the original verb contained the pronominal elements or symbols of the relations of place, which constituted at once the case-endings of the noun and the persons of the verb. A bare root or stem without a pronominal suffix could no more form a noun, than a modification of it could form a verb without a corresponding person-ending. By the lapse of time, the introduction of writing, and the other causes which are always at work upon a language as long as it retains its vitality, the old forms degenerated into those naked shapes in which we find but scanty remnants of the original clothing. A desire for greater distinctness in the applications of the verb led to the introduction of a system of nominative cases, or the express statement of the subject, and then, as the person-endings became less necessary, they were gradually dropt; just as the same causes produced an analogous effect upon the cases of the noun. We have shown that the Sanscrit language, which had no prepositions in the ordinary sense of the word, exhibits a most complete system of case-endings; the person-endings of the verb are also more strongly marked in Sanscrit than in Greek, because the Indians were less accustomed than the Greek to state the subject of the proposition, and in general the language had not attained to a full logical development. With the exception of the verbs in *-ui*, and some of the secondary forms of the common verbs, the person-endings are, as we shall soon show, absorbed in the more modern state of the Greek language.

347 It has long been perceived that the terminations of the verbs in *-ui* are personal pronouns; but it has been sup-

posed by modern scholars (for instance, by Thiersch, in his Grammar, and Pott) that these personal pronouns must needs be nominative cases, the root of the verb constituting the predicate, and the connecting syllable the copula. Nothing, in our opinion, can be more unphilosophical than such a supposition. Even if man, in the rudest and earliest times, had excogitated all the rules of logic which were adumbrated by Plato and set forth as a novelty by Aristotle, it appears to us inconceivable that he should have arranged predicate, copula and subject in an order converse to that which every logician knows to be the natural one. Besides, when the system of nominative cases was introduced, the nominative of the first person was in Latin *ego*, in Greek *ἐγών*, in Sanscrit *aham*; of the second in Latin *tu*, in Greek *σύ*, subsequently *σú*, in Sanscrit *tvam*; and, as we have shown in the preceding book, the nominative sign in nouns expressing the third person was *-s*. Now the oldest forms of the singular person-endings in these languages, so far as they have come down to us, appear to have been *-mi*, *-si*, *-ti*, of which the first and third manifestly refer to the objective cases of the same pronouns: and when the third person appears as *-si*, this is manifestly only a dialectic softening of the objective *t*. In Hebrew it is well known that the pronominal affixes both of nouns and verbs perform the functions of objective cases (see *Maskil le Sophér*, p. 17); and the late Mr. Garnett proved many years ago that the person-endings of all the Indo-Germanic verbs are *in statu regiminis* (*Quarterly Review*, LVII. pp. 93 sqq.)*. The fact is, that the original verbs stands on precisely

* This admirable philologist is entitled to the credit of this important discovery. In the first edition of the present work, the author, not having the *Quarterly Review* of Prichard before him, had attributed the true theory to that distinguished writer, and not to the reviewer, whose name at that time had not been mentioned. This inadvertence was corrected by Mr. Garnett, in a letter dated "British Museum, May 3, 1842," in which he introduced himself to the author of the present book, and claimed as his own the remark referred to in the text. With Mr. Garnett's consent we printed in 1844 (*Varron*. p. 290) an extract from this letter, to which he has referred in one of his papers (*Essays*, p. 269). It may be interesting to the reader to see in Mr. Garnett's own words the vindication of his right to this linguistic deduction. "If Dr. Prichard,"

the same footing as the noun; it is a word, of which the element or differential part might be found in a noun, the constant part consisting, like that of the noun, in a pronominal element, expressing some relation of place. Thus $\delta\acute{\iota}\delta\omega\text{-}\mu$ would signify "giving here," i. e. where the speaker is; $\delta\acute{\iota}\delta\omega\text{-}\sigma\iota$, "giving where the person addressed is;" $\delta\acute{\iota}\delta\omega\text{-}\tau\iota$, "giving there," i. e. at any other place; and similarly with regard to $\tau\acute{\iota}\theta\eta\text{-}\mu$. Now the roots of $\delta\acute{\iota}\delta\omega\mu$ and $\tau\acute{\iota}\theta\eta\mu$ are $\delta\acute{o}$ - and $\theta\acute{\epsilon}$ - respectively*, and both of them represent a Sanscrit *a*, for they correspond to the verbs *dadâmi* and *dadhâmi*. But in each case the root seems to be connected with the person-ending by an intervening *a*, and it is then reduplicated to express more vividly the continuity of the action; a custom which we find in the unformed dialects of rude tribes even at the present day. The root $\delta\acute{o}$ appears with a similar prolongation in $\delta\acute{\omega}\text{-}\rho\acute{o}\text{-}\nu$, "a giving away" ($\text{-}\rho\acute{\alpha}$ -), the case-ending of which implies mere location, and does not, like the person-endings of the verb, mark a particular relative place. As the verb gradually receives its development, we find that the differences of mood and tense affect the terminations as well as the root; but this is sufficiently intelligible, for of course the conjugation would not receive its completion till

he says, "ever did advance that the personal-endings of the verbs are *objective* or *oblique* cases of pronouns, I have done him an injustice, which I ought to repair, for in the *Q. R.* I expressly affirmed that he had overlooked the fact altogether. Indeed, on looking carefully through his book, I find he speaks of the suffixes in question as *abbreviated* pronouns, but never, as far as I am aware, as *oblique* cases. Nor can I discover that they were ever considered in that light by any philologist prior to the publication of the paper in the Quarterly. Gesenius, and other orientlists, speak of them decidedly as *nominatives*; and Lee, though he regards verbal roots as nouns, speaks indeed of the suffixes as *abbreviated* pronouns, but never that I know of as being *in statu obliquo*. The only writer I am acquainted with who has at all adverted to the fact, is the late William Humboldt, and he speaks of it as an occasional phenomenon, in a few languages, without appearing at all aware of the extensive and important application of which it is capable."

* The roots $d\acute{a}$, $\delta\acute{o}$ -, $dh\acute{a}$, $\theta\acute{\epsilon}$ -, are confused in Latin, for *do* means not only "to give," but "to put," as is seen from the compounds *abdere*, *condere*, *dedere*, &c. Pott, *Etym. Forsch.* II. 114; Bopp, *Vergl. Gr.* p. 886; Benary, *Röm. Lautl.* p. 175.

the formation of sentences, when the expression of the nominative or subjective case had become necessary and common; and this, by rendering the person-endings less important, would also make them yield more readily to the laws of euphony, which required modifications of the termination corresponding to those of the root or body of the word.

348 In treating of the person-endings we must consider them as the oblique cases of personal pronouns. The number designated, whether singular, dual, or plural, is to be explained in the same manner as the numbers of those positional words. The division of verbs into different voices, one of which expresses that the action is considered as affecting the speaker or person spoken of, and the other as affecting some other person or thing, depends upon a change in the case-endings; the former exhibits that relation of case which we call the locative, the latter that which is termed the instrumental. But we must also examine the person-endings, thus affected by number and voice, in their appearances as primary or secondary forms; that is, as they appear affected or unaffected by the modifications of tense and mood to which the verb in its full development is subjected. We shall, therefore, first take the primary or simplest forms, explaining them successively as they appear in the different numbers and voices, and then proceed to the discussion of the secondary or subordinate forms. Throughout we shall presume a reference to the chapter on the pronouns.

A. PRIMARY FORMS.

349 1ST PERSON SINGULAR.

That the conjugation in *-μι* is the original one may be proved from the Greek language alone, without the aid of comparative philology. In the first place, those verbs which in the classical ages of Greek literature were still conjugated in *-μι*, such as *εἰμι*, *δίδωμι*, *ἵστημι*, *φημι*, &c., all convey the most elementary ideas ever expressed by verbs: "being," "giving," "standing," "saying," &c. They are words which must have existed in the oldest and rudest state of the language, and therefore could not have owed their existence to the observation of analogies which had arisen subsequently to that earlier state.

Again, the conjugation in *-μ* is departed from only in a few tenses (principally the present and imperfect active) of the ordinary verbs; the other tenses all retain traces, more or less distinct, of the original form. Thus, though we have *τύπτω* we have *τύπτομαι* (which is perfectly analogous to *δίδομαι*), *τύπτοι-μ*, *ἐτυψά-μην*, &c. Finally, the change from *-μ* to *-ω* is explicable, and may be supported by orthographical analogies; the converse is not. In all languages, we find a tendency to abridge words as far as is consistent with the preservation of their meaning, and in those which exhibit systematic composition we observe a continual conflict for mastery between the body of the word and the suffix. The original verbs were very short and simple, and, even when the person-ending was retained at full length, did not fatigue the voice of the speaker; there was, therefore, no immediate reason for abolishing the person-endings even after they had forfeited their claim to indispensable utility. In other roots, which the necessities of language required, the verbal element would be longer, sometimes composed of two distinct stems or a stem and a preposition, sometimes of a heavy, hard-sounding stem, with many consonants, or in general the present tense would be strengthened by insertion, whether of *guna* or *anusvára*, or by the addition of some pronominal element; this of itself, on the principle we have mentioned, would interfere materially with the termination, which when it became less necessary, would be dropt altogether. After this custom of dropping the ending in the present tense had become common, new verbs would be formed on the new, rather than on the old system, and so at length the number of verbs in *-μ* would become comparatively inconsiderable.

350 Supposing *-μ* to be the original ending of the first person, the most natural method of avoiding an additional syllable, while the meaning of the ending was still retained, would be by keeping only the consonant and omitting the final short vowel; this plan we find adopted in Latin, though *su-m* and *inqua-m* are the only verbs which exhibit it in the present indicative; in the other tenses and moods *m* is the regular ending, as in *amaba-m*, *ame-m*, &c. Its omission at the end of the present indicative is perhaps only another instance of that use of the final *anusvára* in Latin, which we have pointed out in treating of the accusative case; for it will be recollected, that the final *m* is liable to ecthipsis in verbs as well as in nouns. But in Greek *-μ* cannot, according to the laws of euphony, stand at the end of a word; in shortening the ending, therefore, in the way we have supposed, the *m* must either have been struck out, or some representative must have been substituted for it. We find both methods

adopted. The former is the common one in the present tense, where we have *τύπτω* for *τύπτο-μι* or *τύπτο-μ*; the latter however appears in the secondary forms, as *ἐτυπτο-ν* for *ἐ-τύπτο-μι*. This interchange of *m* and *n* we have also observed in the accusative case. Bopp is inclined to suppose (*Vergl. Gramm.* p. 626), that *τύπτω-μι*, not *τύπτο-μι*, would be the original form of *τύπτω*, in which he is guided by the analogy of the Sanscrit verbs in *-āmi*, and the Greek *δίδωμι*, *τίθημι*, &c. It seems better to conclude, that, in cases where the verb-root ends with a consonant, the vowel used to connect the stem with the suffix would be a short *o* or *ε*, especially in forms like *τύπ-τ-ω*, *τέμ-ν-ω*, where the root is strengthened by a consonantal addition. As we have suggested above (§ 347), there is reason to believe that the roots of *δίδωμι*, *τίθημι*, &c., are strengthened by an inserted *α*, which is still seen in the third person plural in *-ᾶσι* (below, § 360): and it is a fair inference, that this *α* is the residuum of some pronominal adjunct analogous to the *τ* or *ν* of *τύπ-τ-ω*, *τέμ-ν-ω*, which, therefore, do not need any further corroboration. The long vowel at the end of these barytone verbs is due to the principle of compensation which we so often find in the Greek and other languages. Thus *τύπτω* would stand for *τύπτομι*, as *τύπτεις* for *τύπτεσι*, and *τύπτει* for *πύπτει*. The reader will recollect the formation of the comparative-endings *-ων* from *-ους*, *μᾶλλον* from *μάλιον*, &c. The cases of *δίδωμι* &c., are quite different; in these the verb-root itself is lengthened, as in the nouns *δῶ-ρον*, &c., from the same root.

351 Upon the whole, we may safely conclude, that the first person singular in Greek, Latin, and Sanscrit, was always designated by *m-*, in the present indicative of the old forms of those languages. That this *m-* was the element of the objective cases of the first personal pronouns is obvious. It is also clear enough, that when the verb in active, the person-ending must needs express an agent; in other words, the action or doing implied by the root must be set forth as preceeding from him; this is effected in the flexion-system of the languages we are considering, by putting the name of the agent in the instrumental, ablative, or, what is equivalent in Greek, the genitive case. The strong resemblance which subsists between the instrumental and ablative of the third personal pronoun in Greek, and the termination *-τω* of the third person imperative active, cannot be overlooked: and it has been remarked by Mr. Garnett (*Quarterly Review*, Vol. LVII. p. 99, note), that "the ancient Latin imperatives, *estod*, *vivitod*, and the analogous Vêda-imperative, *jivatât* = *vivito*, are unequivocally in the *ablative* form." See also Curtius, *Sprachvergl. Beiträge*, pp. 270 sqq. In all probability, the ending *-mi* is merely an abbreviation of

the instrumental $mê=mai$, to which it stands related as $\pi\alpha\rho\acute{\alpha}i$ does to $\pi\alpha\rho\alpha\acute{\iota}$, whereas the third person of the imperative prefers the stronger inflexion of the ablative in $-ω[ς]=-ωδ=-ο\theta\varepsilon\nu$, a difference of case which does not produce any real difference in the meaning of the pronoun affixed. Indeed, as the instrumental and locative are often used with the same application (§ 246), and as the differences of voice are indicated by the contrast of their distinctive meanings, it would appear more reasonable that the ablative inflexion should have been used throughout the moods as an indication of the active verb.

352 In the passive or middle, however, we should expect to find indications of a locative-case in the personal suffix: for in this voice the action is supposed to end with (i. e. upon) the agent, as indeed is implied in the name *âtmanê-padam* or "self-form," given to it by the Sanscrit grammarians. That the passive verb, in the languages which we are considering, had not in itself any reflexive meaning, is an obvious fact, if the explanation we have given of the personal suffixes be the correct one, and it may be shown that the Greek middle verb in particular is only an idiomatic application of the intransitive passive (*Gr. Gr.* Art. 432).

The middle or passive person-endings are distinguished from the active by a greater weight and fulness of form. The first person middle in Greek is $-μαι$; in Sanscrit it is wanting, but the other persons exhibit a similar alteration by *guna* of the active person-ending. As the active $-mi$ points to the instrumental $mê$, so $-mai$ must be due to the locative $-mayi$, the person-ending being in each instance, an abbreviation of the regular case of the pronoun. Thus, if $\delta\acute{\iota}-\delta\omega-μ\iota$ means "a giving effected by me," or "I give," $\delta\acute{\iota}-\delta\omega-μαι$ will signify "a giving of which I am the object," the giver being presumed. The analogy of the secondary form $-μην$ shows that the complete locative affix $-mai$ must have been $mên=mayina$; compare $\acute{\epsilon}\nu$, $\acute{\iota}\nu\alpha$, with $\acute{\epsilon}\iota$, $\alpha\acute{\iota}$, and the common locative in ι with the more original form $-ι-ν$. The Sanscrit third person imper. mid. *tudā-tām* may induce us to form the same conclusion with regard to the 2nd and 3rd person-endings in $-o$, while those in $-α$ and $-ε$ are explained by the analogies pointed out above (§ 363).

353 2ND PERSON SINGULAR.

The characteristic of the second person in Greek is $-ς$, and this may be considered as a shortened form of $-σι$ (which is retained only in the Doric $\acute{\epsilon}\sigma-σ\acute{\iota}$, though it appears consistently in the Sanscrit, Zend, and Sclavonic), just as the Latin $-m$ and Greek $-ν$ at the end of other tenses are of the original $-μ$. Besides this, we find a termination $-θ\alpha$, the connexion of which with the second personal pronoun

we have before pointed out (§ 262—4). In the imperative it appears as *-θι*. This ending corresponds to the Sanscrit *-tha*, *-dhi*. Buttmann will not allow (*Ausführl. Sprachl.* § 78, 7, *Anm.* 3), that *-θα* can be considered a termination; he joins it with the *σ*-, which generally precedes it. That, however, *-θα* not *-σθα* is the ending, will appear from the following considerations, in addition to the argument derivable from the analogy of the Sanscrit. The two words in which this termination most frequently occurs, are *οἶσθα**, *ῥῥσθα*, obviously words of great antiquity. The first of these stands for *οἶδ-θα*, for the root is *ῥιδ*-; the second for *ῥ-εσ-θα*, the root being *ῥεσ*-. In these two instances, then, *-θα* is obviously the termination, as is *-θι* in the imperatives *ῥσ-θι*, *φά-θι*, *ῥ-θι*, *κλῦ-θι*, *στῆ-θι*, &c. Although the *σ* cannot be referred to the root in such forms as *τίθησθα*, *ῥρησθα*, &c., they admit of an easy explanation; for in the course of time the pronominal nature of the termination would be forgotten or overlooked, and *σ*, the ordinary mark of the second person, would be inserted on a mistaken analogy, just as we sometimes find *οἶσ-θας* for *οἶσ-θα*. This is Bopp's opinion (*Vergl. Gramm.* p. 655); he formerly thought with Buttmann, that the termination was *-σθα*: in the *Annals of Oriental Literature* (I. p. 42), he remarks, "The Greek language is very fond of prefixing *σ* to *θ*, as is manifestly evinced by the passive participle formed by the suffix *-θεις*; but prefixing *σ* to the *θ*, there is formed *οἶσθεις*, *μνησθεις*, *χρησθεις*, &c. Therefore, it is no wonder if the Greek has formed *σθα* out of the Sanscrit termination *tha*." In the second person of the Latin perfect, we look upon *-ti* as the person-ending, the preceding *s* being a representative of *ka* = *sa* = *ha*, the proper characteristic of that tense.

354 The termination of the second person passive, in the Greek verbs in *-μι*, is *-σαι*, as in *τίθεις-σαι*; in the ordinary verbs this is contracted to *-η*, as in *τύπτει* for *τύπτεσαι*. It is very remarkable, that, though all Greek verbs keep the full form in *-μαι* for the first person, the second person is shortened in this way: and conversely, though in Sanscrit the full form of the second person is invariably preserved, the first person of the passive is abbreviated quite analogously to the abbreviation of the second person in the passive of Greek barytone verbs. Thus we have

<i>bhar-ê</i>	<i>φέρο-ο-μαι</i> ,
but <i>bhar-a-sê</i>	<i>φέρο-η</i> .

* It seems that Sophocles wrote *οἶσθες* in the 2nd person plural: *οἶσθες ἐπὶ δευτέρου προσώπου γράφει ὁ Σοφοκλῆς· καὶ πέποσθες παρὰ Ὁμήρου ἀπὸ τοῦ πεπόνυθατε· οὕτως τὸ οἶσθες ἀπὸ τοῦ οἶδατε· κατὰ συγχοπὴν καὶ τὰ δύο.* Bachmann, *Anecd.* II. p. 358, l. 20.

This omission of the σ in the middle of Greek verbs has been more than once explained (see § 114). We have had a similar evanescence in the nouns (§ 244).

355 3RD PERSON SINGULAR.

Of the third person singular we have little to say, after the general remarks which we have made on the two preceding suffixes. In the Doric forms of verbs in $-\mu$ it is written $-\tau\iota$, which is either softened into $-\sigma\iota$ in the ordinary dialects, or represented by ι , as is the case in all the barytone verbs. For the imperative in $-\tau\omega$, see above, § 351.

In the middle or passive, the regular ending $-\tau\alpha\iota$ is invariably preserved in the primary forms. We have already adverted to the inference which may be drawn from the Sanscrit imperative *tudatām* (§ 352), namely, that $-\tau\alpha\iota$ was originally $-\tau\eta\nu$. The form in $-\sigma\theta\omega$ belong to a later falsification, which will be discussed in the proper place.

356 1ST PERSON PLURAL.

The arguments which have been advanced to prove the original identity of the dual and plural of nouns, apply also to these numbers in the verb; besides, Buttmann has shown (*Ausführl. Sprl.* § 87, 4, *Anm.* 1), that, in the case of the Greek verb, the dual is actually nothing but an older form of the plural. We shall, therefore, consider these numbers together.

In the active voice the Greek makes no distinction between the dual and the plural of the first person; the Sanscrit presents the form *vas* or *va* for the first person of the dual in the active voice, but this is only a modification of the plural *mas*; compare *vayam* for *mayam*, &c. (Bopp, *Vergl. Gramm.* p. 331).

The ordinary characteristic of the first person plural in Greek is $-\mu\epsilon\nu$, the older form is $-\mu\epsilon\varsigma$, which is more analogous to the Latin $-\mu\ddot{u}s$, and to the Sanscrit $-\māś$. If our supposition that the singular $-\mu\iota$ stands for $-\mê$, the instrumental of the pronoun, be correct, then $-\mê\varsigma$, the characteristic of the first person plural in old High German, as well in the secondary as in the primary forms, sets this fact more clearly before us. This $-\mê\varsigma$ cannot stand for $\māś$, as Bopp suggests (*Vergl. Gramm.* p. 635).

When we reflect that the idea of "We," i. e. "I + you," cannot be considered as contained in the *plural* of the first personal pronoun, we shall refrain from adopting the simplest method of explaining this characteristic, namely, by supposing that the final s is merely the ordinary mark of the plural number. If, instead of this, we consider

the last letter as the characteristic of the second person singular, which is of course allowable, we shall find this view harmonize with all the other phenomena of the plural characteristics; it is, too, the only one which is consistent with our *à priori* expectations. In the Vêda-dialects we find the form *-ma-si* as the termination of the first person plural of the active voice: this shows the two pronominal elements at full length.

357 In the middle or passive voice, the terminations of the dual and plural of the first person are in the oldest Greek forms *-μεσθον*, *-μεσθα*, *-μεθεν*, the more recent forms being *-μεθον*, *-μεθα*, where the *σ* is omitted, as in the secondary form of the first person plural of the active verb in Sanscrit. We are inclined, however, to consider the dual form *-με-θο-ν*, or the Æolic *-με-θε-ν*, as the genuine characteristic of the first person plural of the passive voice. The first syllable represents the element of the first person singular, the *θε* (*θο*, *θα*) is, as we have shown, one of the forms of the second person singular, and the final letter is *-ν*, the oldest characteristic of the locative case, which is necessary to the passive voice.

The Indian languages furnish analogies confirmatory of this view. The characteristic of the Sanscrit active-dual is *vas*: that of the passive-dual *va-ha-i*. Here the *ha* stands for the second person (Bopp's *Vergl. Gramm.* p. 651). Thus, Sanscrit *va-ha* = Zend *va-za* = *χζε*; Sanscrit *dê-hi* = Zend *daz-dhi* = *διδο-θι*, and conversely Zend *hista-hi* = Sanscrit *tisht'h'a-si*, and Zend *dadhâ-hi* = Sanscrit *dadâ-si*. The syllable *hai* stands related to *hi* as *-σαι* does to *-σι*, that is, in the relation of locative to instrumental. The same may be said of the Zend *-mai-dhê* (for *-dhi* is one of the forms of the second personal pronoun), and of the Sanscrit *-mahê*, *-mahai*. The forms *-mahi*, *-vahi*, may be compared with the less genuine form *-μεθα*; they have all lost the final *n*, the passive characteristic or locative ending, according to the principle so often explained (§ 114). The full form must have been *-με-θην*, which passed through *-μεθον* and *-μεθα* to *-μεθα*.

358 2ND PERSON PLURAL.

In Greek the second person plural of the active voice appears in a very mutilated state. It is invariably written *-τε*, or in the dual *-τον*. We are enabled, however, by the aid of the cognate languages to arrive at its real form. In Latin it is *-tis* or *-tote*. In the perfect, the plural in *-s-tis* must be explained in the same manner as the singular in *-s-ti*. In Sanscrit we find *-thas* as a dual or older form, and *-dha* as the plural, which is mutilated like the Greek. A

comparison of the Greek dual $\tau\omicron\nu$ with the Latin plural $-tis$ and the Sanscrit dual $-thas$, leads us to conclude that it stands for $\tau\omicron\varsigma$, as $\mu\epsilon\nu$ stands for $\mu\epsilon\varsigma$ in the first person of the plural. We should, however, still be at a loss to explain the ending, were it not for the aid afforded us by the sister languages. It appears from the Sanscrit $tha-s$, that the second person dual is made up of a repetition of the second person singular; and this is farther shown by a comparison of the Latin imperative ending $-tote$ — $tva-te$, with the old Umbrian $-tu-to$.

This view is confirmed by the passive characteristic of the second person plural $\sigma\theta\epsilon$ for $\sigma\theta\alpha$, which in the dual or older form is $\sigma\theta\omicron$ — ν for $\sigma\theta\eta\nu$, and in which the repetition of the second person singular is manifest.

359 3RD PERSON PLURAL.

The third person plural presents us with difficulties considerably greater than either of the other two. It is very hard to determine with certainty the elements of which the dual characteristic is composed, and still harder to reconcile the dual with the plural.

It is only in the historical tenses of the ordinary Greek, that the second and third persons of the dual are distinguished from one another: in the primary forms they are the same in both active and passive, namely, both $\tau\omicron\nu$ in the former, and both $\sigma\theta\omicron\nu$ in the latter; in the secondary forms η is substituted for $\omicron$ in the third person. In Homer there are three passages in which we find the termination $\omicron\nu$ in the third person of historical tenses, and Elmsley has shown (*ad Aristoph. Ach.* 733), that in the Attic writers the second person in the historical tenses was occasionally written $\tau\eta\nu$. It may be laid down, with Buttmann (*Ausführl. Sprachl.* § 87, *Anm.* 2, note), that in the old Ionic the termination $\omicron\nu$ was used for the second and third persons of the dual in all moods and tenses; in the old Attic we find the following distinction,—

Primary tenses and conjunctive, 2nd and 3rd . . . $\omicron\nu$,

Historical tenses and optative, 2nd and 3rd . . . $\eta\nu$,

while in the more modern Greek the distinction was,

Primary tenses and conjunctive, 2nd and 3rd . . . $\omicron\nu$,

Historical tenses and optative, 2nd $\omicron\nu$, 3rd . . . $\eta\nu$.

The same distinction was observed in the imperative; only in this case the third person was distinguished by ω instead of η .

The letter η , in many modern languages an indistinct sound, has made its appearance at the end of Greek words as the representative of so many letters not much related to it, that it might seem strange to any one not acquainted with the freaks of language. It has been

mentioned before (§. 86) that there are only four consonants which ever stand at the end of the word in Greek, ν , σ , ρ , and κ . Of these ρ occurs very seldom in this position, and κ only twice, in $\xi\kappa$ and $\omicron\nu\kappa$, which, as we have shown, are peculiar exceptions. With this fact before us, we need not wonder that, when a consonant ought to stand at the end of a word, in order to represent a significant suffix reduced to its consonantal element, this consonant should so often be represented by ν , which even takes the place of σ , the only other consonant that frequently appears in the same way. Thus we have seen $-\mu\epsilon\nu$ for $-\mu\epsilon\sigma$, and $-\tau\omicron\nu$ for $-\tau\omicron\sigma$ or $-\tau\epsilon\sigma$. On the same principle, we may conjecture that the third person dual, $-\tau\omicron\nu$, stands for $-\tau\omicron\tau\epsilon$, or that, as the second person-ending is made up of the element of the second personal pronoun twice repeated, the third should be constructed by a similar repetition of the third person. We must, therefore, consider the resemblance of the first and second persons of the dual in the active as well as in the passive voice, as either produced by accident or by a mistaken analogy. In the passive, as $-\sigma\theta\omicron\nu$ in the second person stands for $-\sigma\epsilon-\theta\omicron-\nu$, a repetition, namely, of the second person singular with a mark of the locative case, so in the third person the same $-\sigma\theta\omicron\nu$ must stand for $-\tau\omicron-\tau\omicron-\nu$, namely, a similar repetition of the third person singular with the same mark of the locative case. This may seem wonderful,—perhaps, at first sight, hardly credible,—but it is the only way of explaining the fact, and etymologically speaking there is nothing against it. The Sanscrit presents the two characteristics under a form in which we can more easily recognise the distinction of persons. In the active, the second person dual is $-tha-s$ (for $-tha-tha$ or $tha-si$), the third $-ta-s$ (for $-ta-ta$); in the passive, the second person dual is $\hat{a}-th\hat{a}-m$ (for $-th\hat{a}-th\hat{a}-$ with a locative ending); the third, $\hat{a}-t\hat{a}-m$ or $\hat{a}-t\hat{e}$ (for $t\hat{a}-t\hat{a}$ with a locative ending).

360 The genuine form of the third person plural of the Greek active verb in $-\mu\iota$ is $-\nu\tau\iota$, which is still found in Doric remains (Buttmann, *Ausführl. Sprl.* § 107, *Anm.* 7, note), and all verbs give $-\nu\tau\iota$ in the middle or passive. The Bœotians wrote $-\nu\theta\iota$ for $-\nu\tau\iota$ (Böckh, *Corp. Inscript.* i. n. 1569, a. iii.). This is an approximation to the ordinary Greek, in which the termination is $-\{\frac{\nu}{\alpha}\}\sigma\iota$, or $-\sigma\iota$ with a compensation for the $-\nu$. The Dorians wrote $\delta\iota\delta\acute{o}\nu\tau\iota$, the Bœotians $\delta\epsilon\delta\acute{o}\alpha\nu\theta\iota$, the Attics $\delta\iota\delta\acute{o}\alpha\sigma\iota$ or $\delta\iota\delta\omicron\upsilon\sigma\iota$. We have mentioned before that the roots of the verbs $\delta\acute{\iota}\delta\omega\mu\iota$ and $\tau\acute{\iota}\theta\eta\mu\iota$ are $\theta\epsilon-$, $\delta\omicron-$, and that the length of the penultima is occasioned by the insertion of a short α which connects the root with the affix (§ 347). This addition to the root is not found in the first and second persons of the plural, $\delta\acute{\iota}\delta\omicron\mu\epsilon\nu$, $\delta\acute{\iota}\delta\omicron\tau\epsilon$, $\tau\acute{\iota}\theta\epsilon\mu\epsilon\nu$, $\tau\acute{\iota}\theta\epsilon\tau\epsilon$, on account of the greater weight of these forms.

Now the first and second persons of the plural are proparoxytone, but the third is paroxytone. As the contracted forms *διδούσι*, *τιθεῖσι*, *ἰσῶσι*, *δεικνύσι*, are properispome, we may conclude that the accentuation of *διδόντι*, *τιθέντι*, is correct, that the fuller forms were *διδόα-ντι*, *τιθέα-ντι*, and that the additional vowel was lost at a later period in the third than in the two other persons of the plural. This view is confirmed by the Bæotic *δεδόανθι* and the Attic *διδόασι*, *τιθέασι*. That a short *α* is frequently substituted for a *ν*, we have shown in treating of the declensions, and we find instances of it in the tenses of the verb: thus we have *κεκλιᾷται* for *κέκλινται*, *σώσολᾷτο* for *σώσονται*, &c. The *ν* in *διδόντι* would therefore become a short *α*, and not a long one as in *διδόασι*, unless we suppose an original form *διδόα-ντι*, which became *δεδόανθι* in Bæotic, and, substituting *ᾷ* for *ν* and *σ* for *θ* according to the common practice, *διδοᾷ-σι* or *διδόασι* in Attic. That a final *α* of the crude verb is implied in the termination *-ασι* may be also inferred from the perfect active, which invariably terminates in *α*, and uniformly exhibits this form of the third person plural. We cannot believe that this final *α* was found in the present tense of verbs which were otherwise strengthened by pronominal additions. The form *δεικνύασι*, to which Bopp adverts (*Vergl. Gramm.* p. 663), appears to be the offspring of a later use of analogy, and was perhaps suggested by the wish to avoid any risk of a confusion with the singular *δείκνυσι*. The greater weight of the person-suffix explains the form *τιθέαται*, *τιθένται*. We must conclude that the *τι* passed through *θι* into *σι* before the *ν* was lost, and then the change of *διδόνσι* into *διδούσι*, *τιθένσι* into *τιθεῖσι*, &c., is the same as that of *τύπτονσα* into *τύπτονσα*, *ἐνς*, into *εἰς*, &c.

361 The Sanscrit presents us with the fullest analogy for this form of the third person, both in the active and the passive—the former being *-nti*, the latter *-ntê* or *-ntai*. In Latin and old High German it is *-nt* in the active. The Latin passive form in *-ntur* must be reserved for a special discussion. Dr. Prichard (*Eastern Origin of the Celtic Nations*, pp. 134 foll.) first called attention to the connexion subsisting between the Welsh pronoun *hwynt*, “they” (written *ynt* when used as a suffix) and the Welsh characteristics of the third person plural, *-ant*, *-ent*, or *-ynt*. He does not appear, however, to have taken the correct view of the relation which subsists between the pronoun *hwynt* and these suffixes in Welsh. The fact is, we conceive, that there are two uses of *nt* considered as a reduplication of the third pronominal element. It is (1) a sign of the neuter plural (§ 239), and as such appears in *hwy-nt*; (2) a repeated demonstrative, as in the third person plural of verbs. In this latter use, Mr. Garnett (*Quarterly Review*, Vol.

LVII. p. 100) considers it analogous to the Esthonian *need* = *illi*, and derives it from a combination of the demonstrative roots *na* + *ta*. The latter we have already; of the former he gives the following instances: — *na* in the Finnish dialects “this” or “that;” Pali *nam*, “that;” Greek *νν*, “him,” “her,” “them;” Sanscrit acc. dual, *nâu*, “us-two;” Gr. *νῶϊ*; Slav. dat. *nama*; Plur. Sanscr. accus. *nas*; Zend *no*; Latin *nos*; Welsh *ni*; Slav. gen. *nas*; Pali *nê*, *nâ*, “those.” We have before stated our belief that all these have arisen from an obscurer pronunciation of the demonstrative *t*. That *n* stands for this *t* in the person-endings is shown by the secondary forms *ἐτυπτε-ν* for *ἐτύπτει*, &c., and we believe with Kuhn (*de Conjugatione in -μ*, pp. 23, 31), that the first consonant in the plural termination *-nti* is a representative of the demonstrative element *-t*, so that the whole is a repetition of the third person singular, perfectly analogous to that of the other persons which we have seen used to form their plural. The voices are distinguished by the same difference of case as in the other inflexions. The Doric dialect has preserved *-ντω*, the true form of the imperative active (Ahrens, *Dial. Dor.* p. 296). The Attic *-ντων*, and still more the later *-τωσαν*, are due to corrupt analogies.

B. SECONDARY FORMS.

362 The secondary forms of the person-endings are generally shorter varieties of the primary forms: this abbreviation is caused, as we have already hinted, by the augmented length of the verb in the historical tenses. The first person singular is marked by *-ν*, a representative of *-μ* or *-μι*. The same substitution takes place in the Frankish language in the present tense: thus we have *machon*, “I make,” *machos*, “thou makest,” *machot*, “he makes” and “ye make,” but *machomes* and *machont* for the first and third persons plural. We find the same letter standing for *-τι* in the third person singular, and for *-ντι* in the third person plural. It appears, indeed, to be the regular abbreviation of the third person plural, for, though we have beside it a longer form in *-σαν* as the termination of the third person in some of the historical tenses both active and passive, we consider this as an illegitimate and later suffix. Eminent philologists (Buttmann, *Ausführl. Sprl.* § 107, *Anm.* 7, note; Bopp, *Annals of Oriental Literat.* p. 60) regard this *-σαν* as the third person plural of the verb substantive; an opinion from which we entirely dissent, for the following reason:—those tenses in which this ending occurs do not offer any trace of a periphrastic formation in the other persons. Let us

take a simple instance. The imperfect of *τίθημι* runs thus in the active and passive:

Active.	Passive.
ἐτίθη-ν(=μ)	ἐτιθέ-μην
ἐτίθη-ς	ἐτίθε-σο
ἐτίθη-ν(τ)	ἐτίθε-το
ἐτίθε-τον	ἐτιθέ-μεθον
ἐτιθέ-την	ἐτίθε-σθον
ἐτίθε-μεν	ἐτιθέ-σθην
ἐτίθε-τε	ἐτιθέ-μεθα
ἐτίθε-σαν	ἐτίθε-σθε
	ἐτίθε-ντο

Now if we compare these two forms with any common form of the imperfect indicative, *ἔτυπτον*, for example, we shall find that they correspond exactly except in the third person plural. We can hardly believe, therefore, that when such an absolute correspondence exists in every other person, both active and passive, the third person plural of the active alone should be really different in nature and origin. In the analogies for such a variation, for instance, the third person plural of the perfect passive *τετυμμένοι εἰσὶ*, the third person of the Sanscrit periphrastic future, and the second plural of the Latin passive verb, mentioned above, we have clear indications of a participle, which in the last two cases appears alone; but in the case under consideration, the first part of *ἐτίθε-σαν* for instance bears no resemblance to any participle which could be joined with the substantive verb to form a person of *ἐτίθην*. Accordingly we must seek to show rather that the plural endings *ἔτυπτο-ν*, *ἐτίθε-σαν* were originally the same, than that they were different. And this we think possible. If we compare the common ending of the third person plural in the present tense, namely *-σι(ν)*, with the old one in *-ντι*, we observe the following facts. In the present tense a compensation has been made for the loss of the *-ν* in the original ending, and *τύπτουσι* stands for *τύπτονθι*, and ultimately for *τύπτοντι*. The *ν ἐφελκυστικόν* which is found at the end of this termination, when the following word begins with a vowel, may have owed its origin to an indistinct feeling that the *ν* included in the diphthong before the ending was still wanting, or from a mistaken analogy: that, however, it was not essential is shown by the fact that it never appears before a consonant. Supposing then that the original forms of the imperfect were *ἐτιθέα-ντι* and *ἔτύπτο-ντι*, which may be inferred from the middle *ἐτίθειντο*, *ἔτύπτοντο*, and from the old Doric accentuation of *ἔλεγον*, *ἔτύπον*, *ἐφάσαν* (Ahrens, *de Dialect. Dor.* pp. 28 sqq.), we have only to inquire what abbreviations would most probably result from the greater weight of the form. The existing

ἐτυπτον leads us to ἐτίθειαν=ἐτίθην; and as this would be identical with the singular, the analogy of ἤσαν=ἔ-εσα-ντι and of aorists like ἐτυψα-ν, assisted by the -σι-ν of the present, would readily suggest the insertion of σ. The thoroughly corrupt τυπτέω-σαν from τυπ-τέω, shows to what an extent this secondary process might be carried. In Sanscrit we have *abhâ-n*, ἔφασαν, by the side of *adadu-s*, ἐδίδοσαν; in the former case the -n of the suffix -nt is alone retained, in the latter *t* is preserved and softened into *s*.

363 We have thus seen that in the active voice, the secondary forms, when they differ from the primary, are generally corrupted or mutilated. The contrary is the case in the first person singular of the secondary form in the passive, which is written -μην instead of -μαι, and which, as we have seen above (§ 352), must have been the original inflexion. Of the other person-endings, the first and second dual and plural do not differ from the primary passive forms. The third dual is, as we have mentioned, -σθην instead of -σθον, which again is more genuine. The second and third singular and the third plural differ from the primary passive forms by being written -σο, -το, -ντο, instead of -σαι, -ται, -νται. The second person singular is generally subjected to a contraction similar to that of the primary form; namely, as τύπτεσαι becomes τύπτῃ or τύπτει, so ἐτύπτε-σο and ἐτύψα-σο become ἐτύπτου and ἐτύψω.

Bopp (*Vergl. Gramm.* 680) and Kuhn (*de Conjugatione in -μι*, p. 25) have attempted to show that the middle or passive forms are reduplications, namely, -μαι for -μαμι or μᾶμᾶ, and so on; so that the agent as well as the object of the action are expressed by the affix. The latter sees a confirmation of this view in the secondary form -μην, which he thinks stands for μῃμι or μᾶμ. This opinion was probably suggested by the erroneous belief that the person-endings are nominative cases. We have already shown that this is an untenable hypothesis. But there are other objections to this theory respecting the person-ending. If we may consider the active forms as inflexions of the affix, we may fairly conclude that the same explanation will apply to the middle form, and there can be no more reason why part of the active ending should be included in the middle, than there would be for supposing that the locative ending must include the ablative. Besides, in the remaining pronominal elements, which still maintain an independent existence as particles, we have forms analogous to all the person-endings of the verbs, and these particles cannot be explained as reduplications; why then should we attempt such an explanation in the other case? The third pronominal root furnishes us with the following analogies to the person-endings: τοι (corresponding

to the third person singular active); $\tau\acute{o}$ (corresponding to the third person singular passive, secondary form); $\tau\epsilon$ for $\tau\epsilon-\nu$, comp. $\kappa\epsilon$, $\kappa\epsilon\nu$, &c. (corresponding to the second person plural active for $\tau\epsilon-\nu$ or $\tau\epsilon-\varsigma$). The first, the following: $\mu\omicron\iota=\mu\acute{\iota}$ (corresponding to the first person singular active); $\mu\acute{\eta}=\mu\alpha\iota$, comp. $\delta\acute{\eta}$, $\delta\alpha\acute{\iota}$, &c. (corresponding to the first person singular passive); $\mu\acute{\epsilon}\nu$ (corresponding to the first person plural active, though the final letter is of different origin); $\mu\acute{\eta}\nu$ (corresponding to the first person singular passive, secondary form. For the change of $\sigma\alpha\iota$, $\tau\alpha\iota$, into $\sigma\omicron$, $\tau\omicron$, we may compare $\pi-\rho\acute{o}$ with $\pi\alpha\rho\alpha\acute{\iota}$, $\acute{\iota}\pi\acute{o}$ with $\acute{\iota}\pi\alpha\acute{\iota}$, &c.

364 The following table will enable the student to estimate at one view the difference between the primary and secondary forms of the person-endings in the two voices.

ACTIVE.

SINGULAR.

	1	2	3
Primary form	$-\mu\iota$	$-\sigma\iota$, $-\vartheta\alpha$, $-\vartheta\iota$, $-\iota\varsigma$	$-\tau\omega$, $-\tau\iota$, $-\sigma\iota$, $-\iota$
Secondary form	$-\nu$	$-\varsigma$, $-\vartheta\alpha$	$-\nu$

DUAL.

	1	2	3
Primary form	—	$-\tau\omicron\nu$	$-\tau\omicron\nu$
Secondary form	—	$-\tau\omicron\nu$	$-\tau\eta\nu$

PLURAL.

	1	2	3
Primary form	$-\mu\epsilon\varsigma$, $-\mu\epsilon\nu$	$-\tau\epsilon$	$-\nu\tau\omega$, $-\nu\tau\iota$, $-\nu\vartheta\iota$, $-\sigma\iota(\nu)$
Secondary form	$-\mu\epsilon\varsigma$, $-\mu\epsilon\nu$	$-\tau\epsilon$	$-\nu$, $[-\sigma\alpha\nu]$

PASSIVE.

SINGULAR.

	1	2	3
Primary form	$-\mu\alpha\iota$	$-\sigma\alpha\iota$, $-\eta$, $-\epsilon\iota$	$-\tau\alpha\iota$
Secondary form	$-\mu\eta\nu$	$-\sigma\omicron$, $-\omicron\nu$, $-\omega$	$-\tau\omicron$

DUAL.

	1	2	3
Primary form	$-\mu\epsilon\vartheta\omicron\nu$	$-\sigma\vartheta\omicron\nu$	$-\sigma\vartheta\omicron\nu$
Secondary form	$-\mu\epsilon\vartheta\omicron\nu$	$-\sigma\vartheta\omicron\nu$	$-\sigma\vartheta\eta\nu$

PLURAL.

	1	2	3
Primary form	$-\mu\epsilon\vartheta\alpha$	$-\sigma\vartheta\epsilon$	$-\nu\tau\alpha\iota$, $-\alpha\tau\alpha\iota$
Secondary form	$-\mu\epsilon\vartheta\alpha$	$-\sigma\vartheta\epsilon$	$-\nu\tau\omicron$, $-\alpha\tau\omicron$

365 The person-endings in Latin have been occasionally cited; but they involve some difficulties, which seem to invite a special discussion. In the active these are preserved more faithfully than in the Greek, because the laws of the language do not forbid either *m* or *t*, the signs of the first and third person, to stand at the end of the word. In the present indicative, the sign of the first person singular is invariably wanting, except in the case of *sum* and *inquam*. The passive presents much greater difficulties. If we compare *amo*, *amat*, *amant*, *amare*, with their passive forms *amo-r*, *amat-ur*, *amant-ur*, *amari-er*, we should be inclined at first to suppose that the termination *r* or *er*, *ur*, was sufficient to convert an active into a passive form. But then, what does this termination mean, and how are we to explain *amaris* and *amamini*, which do not receive it? Bopp (*Annals of Oriental Literature*, i. p. 62; *Vergl. Gramm.* p. 688) and Pott (*Etymol. Forsch.* i. p. 133, 6) suppose that this final *r* is a representative of the reflexive pronoun, the termination of the second person singular being an inversion for *ama-sir*: Kuhn (*l. l.* p. 26, note) suggests that it may represent the radical consonant of the substantive verb. The latter conjecture rests on assumptions respecting the nature and origin of the person-endings of which we have before expressed our disapprobation. The opinion which Bopp first stated, and which he has now resumed after having abandoned it, rests upon nothing except the analogy of the Slavonic, Lithuanian, and other modern languages*. And this analogy does not furnish *prima facie* evidence of the same value as the consistent harmony of Greek and Sanscrit, which shows that the person-endings are inflexions of the pronouns, the active representing an ablative or instrumental, and the passive a locative case. In the active of the Latin verb, the case of the pronoun is not fully expressed, but we should infer from the Greek and Sanscrit person-endings that the original forms exhibited the ablative or instrumental inflexions, and this inference is confirmed by the imperatives in *-to*, *-tud*, *-to-te* (Garnett, *Essays*, p. 99, note).

* We cannot help regarding it as an indirect testimony against the soundness of this hypothesis, when we find it warmly espoused by a writer who seems to be unable to take a correct view on any point of grammatical criticism. The Professor of Comparative Philology whose ludicrous suggestions have been noticed more than once in these pages, has written a long paper (*Proc. of the Philol. Soc.* Vol. v. nos. 107, 108), to show that the *r* which marks the person-endings of the Latin passive verb, was nothing else than the accusative *se* of the reflexive pronoun, and he even goes so far as to seek for a similar explanation of the Greek termination *-αι*, forgetting that it is the same as the Sanscrit *ê*, and was also represented by *-ην*, *-α*, *-ον*, and *-ο*. But, as Alcibiades says, *περὶ ὁμολογουμένης ἀνοίας οὐδὲν ἂν καινὸν λέγοιτο*.

That the passive person-endings in Latin exhibit an oblique case of the same force as that which marks the passive in Greek may be proved to demonstration. The steps of the proof are as follows: (1) The fullest forms of the passive inflexion in Greek are *-αι*, *-ην* (like *δαί*, *δῆν*), with weaker forms in *-ον*, *-α*, *-ο*. (2) Corresponding to these we have adverbial inflexions in *-δην*, *-δον*, *-δα*. (3) These adverbial inflexions have the same force as the Latin adverbs in *-tim* and *-ter*; compare *βά-δην* with *pedetentim*, and *δοθῆναι-δόν* with *concordi-ter*. (4) In the isolated form *igi-tur* this ending appears with the short *ῖ* instead of *ῑ*, as in the third person singular and plural of the Latin passive verb. And there can be no doubt as to its locative meaning. According to Festus (p. 105 Müller) *igitur* signifies *inde*, *postea*, *tum*. It means "thereupon" in a fragment of the XII Tables (Varron. p. 203): *si in jus vocat, ni it, antestator; igitur em capito*. And it denotes "then" as the antecedent to *quando* in Plautus, *Miles Glor.* III. 1, 177: *quando habebo, igitur rationem mearum fabricarum dabo*. From all this it is certain, if any thing can be certain in philology, that the *-ür* or *-ër* of the Latin passive is a locative ending equivalent to the *-ην* or *-αι* of the Greek. It is only in the third person, singular and plural, that we have the affix complete. The first person singular has suffered a contraction similar to that which we have pointed out in the Sanscrit: *amor* stands for *amömur*, as *bharê* does for *bharamê*. The first person plural is also contracted (*amamur* stands for *amamusur*), but not to so great an extent. The second persons singular and plural require a different explanation. (a) The former, which ends in *-ris* or *-re*, is thought by Pott and Bopp to be reducible to the analogy of the other persons, according to the theory which they have adopted regarding their formation. Thus Pott says (*Etym. Forsch.* I. p. 135) that *ama-ri-s* is equivalent to *amas se*, the final *s* being the reflexive pronoun, and the *ri* being the usual alteration of the complete second person-ending *-si*. Bopp (*Vergl. Gramm.* p. 688) doubts whether to adopt this view, or to suppose that there is a metathesis of the ending, so that *amaris* stands for *amasir*. There are several objections to this mode of considering the subject, even though we should suppose that the final *r* of the imaginary *amasir* could be taken as the sign of the locative case, which would leave the vowel *i* unexplained. In the first place, this hypothesis creates a difficulty in the case of the ending *-re*, which is found consistently in the imperative and generally in the oblique moods and tenses, even in the best writers; for, if this *-re* is merely the mark of the second person, the second persons in question are all active forms. Again, it will be recollected, that in the active voice of the Greek and Latin verb the second person of the imperative

differs from the others, in the absence of any sign of person, not in the want of any other characteristic. Thus, we have *τύπτε*, *ama*, &c. The principle is the same as that which has occasioned an omission of the nominative sign in the vocative case (above, § 252). Analogy would, therefore, favour the supposition that the *-s* which is omitted in *amare* is the sign of the second person, and not a mark of the passive voice. The word *amare*, which remains, is identical with the infinitive active. Now the infinitive and imperative have other points of resemblance in regard to form, as we shall see in a future chapter; thus *τύψαι*, the second person singular first aorist imperative middle, might be thought the same word as *τύψαι*, the first aorist infinitive active: it is also well known to every reader of Greek, that the infinitive is often used for the imperative. The Latin infinitive in *-re* corresponds, as we shall show more at length hereafter, to the Æolic infinitive in *-ις* = *-σι*; they are both verbals, formed with the second pronominal suffix, and used in the locative case. We shall also endeavour to prove that a passive verbal is formed from the active infinitive. Now the difference between *amare* and *amarier* is one of case only: the more common form of the latter word is *amari*, in which even this difference is neglected, for the *i* belongs to the verbal in *-ris* = *-sis*, as appears from the forms *amaris*, *γέλαις*. All things considered, it appears to be far from improbable that the second person passive, *amare*, is this verbal which is also used for the infinitive, and that *amaris* was formed, by an addition of the characteristic of the second person, on a mistaken analogy. If this supposition cannot be admitted, we can only suppose that the *r* of *amaris*, &c. represents the *ῥ* which is inserted in certain forms as a mark of the passive in Greek. That *r* had this value in old Latin and the other Italian languages is well known (*Varron*. p. 82). And it is possible that the *r* at the end of *igitur*, *sapienter*, &c. was identical in origin as in use with the Greek *-ῥι*. (b) We might suppose that the second person plural of the Latin passive verb, which ends in *-mini*; bore a similar relation to the Greek infinitive in *-μεναι*, and indeed this has been suggested by Gräfe (*das Sanskrit Verbum*, p. 120). That this, however, is not the case, but that the second person plural is a participle in the nominative case with the copula suppressed, formed indeed by the same pronominal suffix as the Greek infinitive referred to, but not used like it in the locative, appears from the following considerations, which were first brought forward by Bopp (*Annals of Oriental Lit.* i. p. 51; *Vergl. Gramm.* p. 689). It is clear that the Latins had a passive participle in *-minus*: we find it rather shortened in *alu-mnus*; *Vertu-mnus* (comp. *αρήδμενον*, &c.); *calu-mnus* presumed in *calu-mnia*, and obviously the participle of *calvor* (*Gaius*, L. 233, *pr. D. de Verb.*

Signif.; Varron. p. 204); *auctu-mnus*; *æru-mna*; *da-mnum*, &c.; and at full length in *ter-minus*, *fe-mina*, and *ge-mini* for *genimini*. In the imperative it is written *-minor*, as in *amaminor*. Now the sign of the plural nominative in the old Umbrian is *-r*; thus we have in the Eugubine tables *subator*, *screhitor* for *subacti*, *scripti*, corresponding to a singular form in *-o*, as *orto*, *subato* for *ortus*, *subactus*; and, what is still more to the point, the Latins had a singular imperative in *-mino*; thus we find *famino* = *dicito*, in Festus (p. 87), *præfamino* = *præfato*, in Cato (*R. R.* 141), and in an inscription, published by Gruter (p. 204), we have *is eum agrum nei habeto nei fruimino*, where the participle in *-mino* is clearly used for the third person singular. There need be no confusion between the *-r* of *-minor* and that which marks the other persons of the passive voice. As *-r* is the mark of both genitive singular and nominative plural in the Umbrian, so its substitute *-s* designated both of the same cases in old Latin, and its vocalization *-i* again the same two cases in the more modern state of the language. Nor need we be surprised that the termination is fixed, and does not change according to the gender of the substantive; for when the use of this participle without the verb *estis* became permanent and regular, the gender of course would not change: if it did it would be unnecessary to investigate the form at all, since it would then stand on the same footing with the Greek use of the participle for the third person of the perfect passive, *τετυμμένοι εἰσὶ* being the regular form. In this case, however, the copula is never omitted. At least, it is clear that in the only instance which has been quoted to prove the contrary*, namely, Æschyl. *Eumen.* 340, the true reading is not *σπενδόμεναι*, for the immediately following *ἐμαῖς, καταφέρω*, &c. would then be intolerable; and the *μηδ' ἐς ἄγκρισιν ἔλθεῖν* would have no meaning, if applied to the Eumenides, whose special business was to impeach the homicide. Having regard to the metre and to the whole context we have ventured to read the passage thus in our recension of the *Eumenides* (Lond. 1848):

σπενδόμενος δ' ἀφελεῖν τινὰ τάσδε μερίμνας,
 θεῶν δ' ἀτέλειαν ἐμαῖς λείτταις ἐπικραίνειν,
 μηδ' ἐς ἄγκρισιν ἔλθεῖν,
 Ζεὺς αἰμοσταγὲς ἀξιόμισον ἔθνος τόδε λέσχα
 ἄς ἀπηξιώσατο,

i. e. "Zeus, being anxious (making a business for himself, cf. *Agam.* 147) to relieve every one from these cares, and by my ministrations to

* In Æsch. *Suppl.* 40, we ought to read *ἐπικεκλόμεθα*. The change of number in the antistrophe merely indicates, as usual, a solo by the Coryphæus.

obtain an immunity for the gods, and not to be troubled with trials, has renounced all intercourse or dealings with the odious race of homicides." Although we do not believe that the participle in *-μενος* is used as a primary predicate without the copula, we are aware that with other participles this construction is not uncommon (see *Æschyl. Agam.* 169, 515, ed. Klausen). And we need not trouble ourselves to find Greek analogies for a phenomenon which is one of the most singular features of the Latin language. The best syntactical parallel for Bopp's explanation of the second person plural passive in Latin, is one which he has pointed out in the Sanscrit language. There is a periphrastic future in that language, of which the third person, singular, dual, and plural, appears to be nothing else than the nominative masculine of a participle having a future sense and formed by the suffix *trī*. In the nominative case singular of this participle the *r* is left out and a long *â* substituted for it, as in *dâtâ*, "about to give" (*daturus*); but the nominative of the dual and plural are *dâtârau*, *dâtâras*. The first and second persons of this future are expressed by a combination of this participle with the verb substantive, as will appear from the following scheme:

	Sing.	Dual.	Plur.
1	<i>Dâtâsmi</i>	<i>Dâtâsvas</i>	<i>Dâtâsmas</i>
2	<i>Dâtâsi</i>	<i>Dâtâsthas</i>	<i>Dâtâstha</i>
3	<i>Dâtâ</i>	<i>Dâtârau</i>	<i>Dâtâras</i>

In the first and second persons the participle and verb are sometimes separated by the intervention of other words, as in *kartâ tad asmi tē*, "I will do this for you,"—*facturus hoc sum tibi* (*Mahâ-Bhârata*); *katham trâtâ parasutân asi?* "why are you going to preserve the sons of another?"—*cur servaturus alius filios es?* (*Râmâyana*). The suggestion of Ewald, in his review of Gräfe (*Zeitschrift für die Kunde des Morgenlandes* for 1837, pp. 110 foll.), that *-mini* is a corruption of the Sanscrit *-dhvam*, does not appear to us to merit any serious attention.

366 We cannot leave the subject of the person-suffixes without making a few remarks on an interesting phenomenon which Bopp was the first to explain satisfactorily, and which he calls the "influence of the weight of the person-endings." Every student of Greek grammar must have remarked, that though the existing verbs in *-μι* are all formed from roots ending in a vowel or *-νν*, which is regularly lengthened when joined to the person-endings, yet this is the case only in the singular of the active voice. The explanation of the phenomenon is as follows. In the process of abbreviation always going on in

languages which admit of indefinite composition, there is a war between the body of the word and its appendages; and when these latter become very weighty, the curtailment falls upon the body of the word. Now all the dual or plural person-endings are duplicates of the singular, and, therefore, twice as heavy, and the passive endings are, as we have seen, necessarily fuller than the active. Accordingly, to keep up the equilibrium of the verb, it was necessary that the root should be left in its simple form in those persons where a heavier system of terminations was adopted. In the third person plural active the long syllable is retained, but, as we have shown, by a sacrifice of part of the termination. For the rest, we may repeat what we have said before, that a principle of equilibrium or compensation is observed throughout the Greek language, so that this "influence of the weight of the person-endings" is not a new or isolated phenomenon, but a good example of the general rule.

CHAPTER II.

THE TENSES.

367 Relations of mood and tense. Their proper arrangement. 368 Limitations of Bopp's theory of agglutination. 369 Genuine forms of verbs include pronominal adjuncts. 370 Augment and reduplication are not identical. The augment ἐ- from ἀνα expresses distance. 371 The future σ- an indication of proximity. 372 Connexion of aorist and future. Burnouf's theory of the tenses. 373 How the aorist combines the expression of posteriority with that of past time. 374 The 2nd aorist. 375 The desiderative in -σειω. 376 The 1st and 2nd perfect. 377 Aorist and perfect agree in termination, and differ in the reduplication of the latter. This is shown by the Latin forms of the perfect. 378 Repetitions of the termination in Latin. 379 Passive aorists: erroneous views respecting these formations. 380 Supposed active aorists which must be considered as belonging to this class. 381 Aorist in -ην due to the insertion of the pronominal element ya. 382 Aorist in -θην similarly formed by the insertion of *thya*. 383 This last element is not immediately connected with the root of *τιθημι*. Middle forms with transitive signification. 384 Middle futures to active verbs. 385 Abnormal formation of passive futures. 386 Tenses in *σπον*. 387 Verbs in -στω.

367 **I**T is difficult to discuss the various questions connected with the development of the tenses in Greek, without including some topics which properly belong to an inquiry into the origin and meaning of the modal inflexions, because, as we shall soon see, the inflexions of tense and mood are in fact identical. In the progressive analysis, however, of the verbs, it is customary to consider the expression of the relations of time immediately after those of number and person, and distinct from those of modality; and since these must be considered as subject to some sort of modality, to treat of them in the first instance as they appear in the indicative mood, in that mood which is always used in the *oratio directa* when nothing beyond assertion is intended. For form's sake, we shall abide by the old method.

The tense-system of the Greek verb is wonderfully comprehensive; in number of tenses it far exceeds the Latin, and in the preciseness of their significations it leaves the Sanscrit a long way behind. The proper and most general division of the Greek inflexions of tense and mood, is into *definite* and *indefinite* forms. In accordance, however, with the old system, we will first discuss the tenses agreeably to the three great

divisions,—according as they signify *present*, *past*, or *future* time. Of these divisions, we must omit the present tense: the affections of that form are not so much variations of tense, as peculiarities of conjugation; it belongs, therefore, to a future chapter. Before we discuss in detail the different tense-forms, it may be convenient that we should state the general results at which we have arrived. It is hoped that the reader will be convinced that the proper expression of past time is by means of the prefix *a-* or *e-* from *a-na*, denoting distance or separation; that future time is expressed by the second element, under the form *-s* implying proximity; that continuous action is denoted by reduplication; posteriority in past time by a combination of the prefix *e-* with the affix *-s*; and continuation up to the present time, by a combination of the reduplicated root with the latter affix. These are the regular forms. Abnormal varieties will be noticed in the proper place.

368 It will, perhaps, be proper that we should in the first place make a few remarks on the theory of Bopp, according to which many of the past and future tenses are formed by agglutination, or composition with the substantive verb. Thus he thinks (*Annals of Oriental Literature*, p. 45) that *-εσω*, middle *-εσομαι*, is properly the characteristic of the future tense, and that this is merely the present tense of the substantive verb *ΕΣ* provided with *-ω* for the termination, to which the usage of language has given a future signification. He even goes so far as to assume that *ἔσομαι* may be an abbreviation of *ἔσέσομαι*, and (p. 61) that *ἐήσαν* is a compound of *ἐή* and *σαντι*! He conceives there is an analogy for this in the Sanscrit future characteristic *-syāmi*. “It may be supposed,” he says (p. 47), “that the root *As* would have had a future tense originally, and it seems to me credible that *syāmi* is this future tense, being lost by lapse of time in disconnected use, and being found at present extant only compounded with attributive roots.” In the same way he considers the first aorist, as it is called (*ἔτεπ-σα*, &c.), as a compound of the root of the attributive verb with the first preterite of the substantive verb, and similarly analyzes *fu-erunt* for *fuesunt*, *fu-erim* for *fuesim*, *fac-sim*, &c. In favour of this general view, he adduces the Provençal compound futures, *aurai* for *aver ai*, &c. (p. 46). But these are widely different formations from those which he imagines in Sanscrit and Greek. The two parts of the compound are both existing words, and may be written separately, as indeed appears from the instances which he

quotes from Sainte-Palaye: *compatar vos ai* for *je vous compterai*; *dar vos n' ai* for *je vous en donnerai*; *dir vos ai* for *je vous dirai*; *dir vos em* for *nous vous dirons*; *gitar m'etz* for *vous me jeterez*. See also Raynouard, *Gramm. Romane*, p. 221. Whereas his supposed compounds are made up of a root, which of course cannot exist separately, and of a termination which never does appear as a distinct word; for there is no such verb as ἔσσω in Greek, and *syâmi* is equally imaginary. There are instances of compound tenses in Sanscrit: namely, the future, of which we have already spoken (§ 362), and which is composed of a participle and the full verb *asmi*; also, a preterite formed of an abstract substantive in *â*, used only in the accusative *âm*, and corresponding to an infinitive in Zend, and one of the three verbs *âsa*, "I was," *babhûva*, "I have been," and *chakâra*, "I have made:" thus from the root *iç*, "to rule," we have the abstract substantive *içâ*, accusative *içâm*, and by composition with the perfects of *as-*, *bhû*, and *krî*, are formed the perfects *içâm-âsa*, *içâm-babhûva*, and *içâny-chakâra*, all signifying "I ruled" (Bopp, *Krit. Gramm.* p. 229). These compounds might be divided, as is often the case with the former. To a certain extent, we recognise the truth of Bopp's theory in its application to the Latin tenses in *-bo*, *-bam*, and *-vi* (see *Vergl. Gramm.* p. 804, cf. *Varron.* pp. 353 sqq.), and we have elsewhere pointed out an agglutination running through all the tenses of the Latin verbs in *-so*, *-sivi* (*Varron.* p. 352). There are also instances of auxiliary or periphrastic formations in Greek, of which we shall speak hereafter, but they are all made up of distinctly developed verbs, and therefore furnish no analogy for the support of Bopp's theory. In general, we have no more right to presume a composition in etymology when the elements never exist separately, than we have to infer an ellipsis in syntax, when the supposed full form never occurs.

369 But perhaps the greatest objection to this comprehensive theory of agglutination, arises from its contradiction to a mode of developing the tenses natural in itself and supported by every analogy of comparative grammar. In the verb, as well as in the noun, there is a wide distinction between compound words and those which are merely developments of a root by means of pronominal additions. In pointing out the analogy between the verb and the noun, we have mentioned that the person-endings in their modifications correspond to the cases. We are convinced that the differences of tense and mood, and, in some instances, of voice, were originally expressed by pronominal adjuncts, the same in kind with those which constitute the affixes between the root and case-ending of a noun. There are in fact two ways in which the crude-form of a word, whether it be a noun

or a verb, may be affected. It may either be affected internally, that is, by reduplication, *guna*, or *anusvāra*, or externally, by means of some prefix or affix. The first method is adopted in the two primary tenses, the present and perfect, as will be shown in the chapter on the conjugations. The second is applied to the formation of all the other moods and tenses, and, in some cases, also to the expression of the passive voice. This external pronominal affection is brought about in two ways; first, by a simple prefix of the demonstrative element *ā* or *ē*, called the augment: secondly, by an affix which is always some modification of the second pronominal element: thus we have aorists and futures under the form *sā*; perfects under the form *kā* or *hā*; the optative mood under the form *ya*; the passive voice under the form *ya* or *thya*; and sometimes two forms of the same element are combined, as in the iterative *s-ka*, and, according to one view, in the desiderative *s-ya*, and the aorist *th-ya* just mentioned. In a subsequent chapter we shall refer to the same root the derivative affixes in *-ḡa=dya*, and *-éa*, &c.=*ya*. We begin with the augment.

370 In the Greek system of tenses, past time is denoted by a short *ē* prefixed to the verb, or, apparently, by a reduplication of the first consonant and root-vowel, which, however, is generally altered according to certain rules. Buttmann is inclined to consider the latter as the original characteristic of past time, the former being a mutilation of it (*Ausführl. Sprl.* § 82, 3, note). Even though we had no other objection to offer to this view, we should consider Bopp's argument fatal to it. The historical tenses in the Sanscrit verb are marked by an augment *ā*: the perfect, in the same way as the Greek, by reduplication: but, as Bopp remarks (*Annals of Oriental Literature*, p. 41), "the Sanscrit augment has no connexion at all with the reduplication, because the redoubled consonant is generally articulated by the vowel of the root; *tup* forming *tutup-*, and *liç*, *liliç*; now, if the first preterite of these roots were *utôpat*, *ilêcat*, instead of *atôpat*, *alêcat*, then it might be said that there exists some connexion between the reduplication and the augment, when there also would be a mere inflexion, whilst, in its actual state, I consider it as an affix which had its proper signification." There are, however, other reasons for believing that the augment and reduplication are essentially different. Besides the repetition of the initial consonant with *ε* to form a perfect, there is another reduplication, frequently found in verbs in *-μ*, of the initial consonant with a short *ι* to form the present and imperfect. Thus we have *τι-θη-μ* in the present, and *τε-θει-κα* in the perfect. We believe that there is no essential difference between these two prefixes: the difference of tense is expressed by the suffix *-κα*

and the change of the root-vowel. What the prefix or reduplication means, we must now endeavour to find out. The root $\theta\epsilon$ - might appear in a noun,— $\theta\epsilon$ -ός for instance—as well as in the verb $\tau\acute{\iota}$ - $\theta\eta$ - $\mu\iota$. In the noun it might imply that the person indicated was “a placer,” but in the verb it must convey an idea of an action—“a placing.” Now an act necessarily implies a continuance or duration, and what more simple method of expressing this could we desire than by a repetition of the root? At any rate, we are told that, in the broken English of the Negroes, acts are expressed by repetitions of substantives. Just so we believe it was with the original Greek present tense. The present and imperfect both express a continuance— $\tau\acute{\iota}$ $\theta\eta\mu\iota$, “I am placing,” $\epsilon\tau\acute{\iota}\theta\eta\nu$, “I was placing.” The perfect expresses the continued state after the act had taken place: it is a mixture of present and past time: it speaks of the person’s state or duration as present, of the act as past; $\tau\acute{\epsilon}$ - $\theta\epsilon$ - $\kappa\alpha$, “I am in the state of a person who has placed.” The distinction between the aorist and these reduplicated tenses consists in this, that the aorist always speaks of the action as single, as confined to a point of time, and this meaning it retains through all the moods, even the imperative, as Greek scholars have fully shown. Now the aorist never admits of reduplication, even in those verbs in which the present, &c., are reduplicated, except in some cases, when it entirely loses its meaning.

In his earlier treatise on the verb, Bopp endeavoured to connect the privative signification of the particle *a*- with the temporal augment. He wrote as follows (*Annals of Oriental Literature*, p. 27): “What the *a*, prefixed to (Sanskrit) verbs in order to form a preterite, originally signified, I do not know, but this I know, that it is prefixed in the same manner to nouns with the sense of a negative and privative particle; for instance, *adīna*, happy (not miserable), *anindita*, dear (not despised), *abala*, weak (without strength), &c. It would not by any means be contrary to the general practice of languages, if by the words *adīna*, *anindita*, exceeding the primary sense of the negative particle *a*, the Sanscrit had also signified one *who has been miserable*, *who has been despised*—but who is not now miserable, not now despised; in that case there might have been a closer connexion between *a* negative and *a* preterite, than would be evident at first sight; or, in other words, the particle *a*, expressing in its primitive sense negation, can very properly in a secondary sense indicate past time, that is to say, deny the existence of the action or quality with respect to the present time. One might ask why in this way *a* is not as well employed to form the future tense, for neither in this tense does the action or quality expressed by the verb actually exist: but the usage of language is despotic, arbitrarily employing its means

without controul. Another objection could be taken against the original identity of the negative *a*, and the *a* expressing past time, from the case of the first being employed in Greek under the form of α , the second under that of an ϵ , so that different forms answer to different meanings. But it is very often the case, that one original word produces, in languages originating from others, two, three, or more words, with slight variations in form and meaning; and this practice has particularly contributed to the copiousness of the English language. For instance, to *stay* and to *stand* have the same origin; both are variations of the Sanscrit root *sthā*, to stand. *I stay* agrees with the German verb *ich stehe*, signifying 'I stand,' of which the preterite is, *ich stand* (I stood), which is considered as a new root in English." In our opinion, an opinion subsequently adopted by Bopp himself and by other philologists, the augment is the pronominal root $\xi = \acute{a} = \acute{a}v\acute{a}$ (§ 114), which we find elsewhere as denoting distance or remoteness*. We have seen how this idea of separation is connected

* The opinion that the augment is a pronominal particle denoting distance or remoteness, that is, originally in space, and then in time (above, §§ 54, 55), was stated, as in the text, in the first edition of this work published in February, 1839, and we claim this theory as an important discovery, which has been confirmed by the subsequent adhesion of some of the best philologists. Bopp, whose explanation of the augmented past tense as a negation of the present, had been severely ridiculed by Lassen in 1830 (*Indische Bibliothek*, Band III. Heft I. p. 79), and by Gräfe in 1836 (*das Sanscrit Verbum*, p. 103, note 57), made an attempt to defend it in the 4th part of his *Vergleichende Grammatik*, published in August, 1842, when he had been possessed of the first edition of this work for more than three years. In § 540, however, without any acknowledgment, he adopted our identification of the negative $\acute{a}$ -, $\acute{a}v\acute{a}$, with the pronominal word signifying distance, and recognised the possibility of the latter meaning in the augment. He was followed in 1846 by G. Curtius, who in his *Sprachvergleichende Beiträge* gives more than one indication of his acquaintance with the *New Cratylus*, and who in pp. 128 sqq. formally adopts our view on the suggestion, as he professes, of Bopp, considering the augment as equivalent in meaning to the German *da*, especially in the combination *damals*. A similar view is accepted by Steinthal, in his essay *de Pronomine Relativo*, 1847, p. 62. He says: "augmenti a significationem statuo esse proprie: *illud, illic, tunc*, ($\xi\delta\omega\nu = \text{tum dans ego}$, $\eta\nu = \text{tum sum}$)." But by far the most important confirmation of our theory was that which it received in May in 1844, from the excellent English philologist Mr. Richard Garnett, who contributed to the Philological Society (*Proceedings*, Vol. I. no. 23) a paper "On the Origin and Import of the Augment in Sanscrit and Greek," in which his object was "to show that the explanation which Bopp himself allows to be admissible—namely, that the augment may be regarded as a demonstrative particle, primarily expressing *remote place*, and secondarily *remote time*—is the one which unites the most probabilities in its favour." Mr. Garnett supports our view by arguments deduced from an examination of a great number of languages. In the second edition of his tract, entitled *Sprachvergleichung in ihrem Verhältniss zur classischen Philologie*, published in 1848, Mr. G. Curtius has

with that of the first personal pronoun (p. 244), and we shall thus understand how the separate particle *sa-ma*, which denotes completeness or all between the near and the here, is used as a mark of past time in Sanscrit (p. 256). The definiteness of locality presumed by these pronominal roots would render them unsuitable for the expression of future time; in looking back on a past action, we always, in some measure, fix its position, or regard it as fixed, with a subordinate idea of distance,—“that which is gone by;” in looking forward to the future, our anticipations are always indefinite and confused, though perhaps connected in all cases with a sentiment of proximity or approach—the idea of “that which is coming.” The pronominal root, in the former case, is used as a prefix, and the accent is drawn back on it to express that the time referred to is gone by, just as conversely future time is expressed by a suffix. A striking analogy in support of this is found in the Greek prepositions of two syllables, which throw their accent backwards or forwards, according as the noun to which they refer precedes or follows. We observe something very similar in the shifting of the accent in common conversation. It is scarcely necessary to refer to the argument for the difference of the augment and reduplication which is afforded by the augmentation of the reduplicated perfect to form the plusquamperfectum.

371 The addition of the letter σ - to the root of the verb is the commonest method of denoting the future in Greek. This letter, as we have mentioned above, represents the second pronominal element; its use to denote the future is due to the principle just alluded to,

the effrontery to say (p. 72), referring to his *Beiträge* of 1846, “I have since seen the explanation I have there given confirmed on perfectly distinct grounds. Mr. R. Garnett has arrived at the same opinion quite independently of me.” Independently enough no doubt; for he adopted in 1844, and Bopp accepted in 1842, a theory which we had put forward in 1839; so that Mr. Curtius had little right to claim as his own discovery, a piece of information, which he either had acquired or might have acquired exactly seven years before he wrote a line on the subject. On the whole, we feel ourselves constrained to assert that Mr. Curtius, availing himself of the ignorance of English philology, which is a characteristic of his countrymen, has endeavoured to appropriate to himself the merit of the attempt, which was first made by the present writer, and that he not only borrows from us many details, but gravely puts forward *totidem verbis* as his own original thought the idea which led to the composition of this book. Even his title, *Sprachvergleichende Beiträge zur griechischen und lateinischen Grammatik*, “Contributions of Comparative Philology to Greek and Latin Grammar,” seems to have been suggested by the title “Contributions (i.e. *Sprachvergleichende Beiträge*) to a more accurate Knowledge of the Greek Language.” We have given elsewhere a sufficient proof of our charge against Mr. Curtius (*Classical Scholarship and Classical Learning*, pp. 234, 235).

that the future, or, as the Germans more correctly call it, *Zukunft*, properly refers to an approximation or "coming." Indeed, the idea of union is not excluded from our notions of future time. "The next day," means the day *following*, not the day *past*: and as the augment points to *ἀνά*, indicating "distance," so the future sign leads us to *σύν*, indicating conjunction. We find this illustrated by the phraseology of the best authors. Thus, οἱ ἔνωθεν, or ἐπ' ἐνωθεν, are those of former times (Theocr. vii. 5), but τὸ ἐχόμενον ἔτος (Thucyd. vi. 3), "the adjoining year," means the year which follows. In certain cases the letter *-σ-* is not immediately joined to the root, but a short vowel *ε* intervenes, just as we have both *liebete* and *liebte* in German, both *charméd* and *charm'd* in English, or, to take a still more striking analogy from our own language, just as the *e* is regularly *sounded* in some participles, and as regularly *dropt* in others. Of this common future in *-σω*, there are two leading modifications in Greek; they are called by grammarians *the Attic future*, and *the second future*. The distinction between these two futures, which both end in *-ω* in the Attic dialect, consists in this, that, whereas in the Attic future in *-εω*, *-ῶ*; *-αω*, *-ᾶ*; the *ε* or *α* belongs to the root,—in the second future the *ε* included in the *ῶ* is added to the root: and that in the verbs which form the future in *-ῶ* for *-ίσω* the characteristic of the verb is dropt; whereas the second future keeps its characteristic unaltered. The second future is the regular form for verbs ending in *λ, μ, ν, ρ*. It is to be observed that the Ionians used the uncontracted form in *-έω* instead of the Attic future, and that in Homer we have such futures as ἐρύω, τανύω for ἐρύσω, τανύσω. In general, we may say of the two shortened futures, that they are abbreviations, the Attic future of a future in *-σω*, the second future of a future in *-έ-σω*, the *σ*-being omitted as in τύπτει for τύπτεσαι, δῆμοιο for δημόσιο, &c. (see § 114). If we can understand that δημόσιος and χρύσεος belong to the same formations, we shall have little difficulty in identifying the ordinary future in *-σω* with its weaker form in *-εω*.

372 The circumstance most deserving of notice in the future is its connexion with the tense called the aorist. Thus we have, corresponding to the regular future τύπ-σω, the regular first aorist ἔ-τυπ-σα, actually differing from it only in the augment. In fact, ἔ-τυ-ψα = ἔ-τυψον (cf. τυπτόμεθα, τυπτόμεθον) stands related to τύψω = τύψομι, just as ἐτίθεια = ἐτίθειν stands related to τίθειμι, that is, as imperfect to present. We shall show, in the following chapter, that the same relation subsists between the subjunctive and the optative. The connexion between the future and the aorist was first pointed out and explained by J. L. Burnouf, in his *Méthode pour étudier la langue*

Grecque, § 255, from a comparison with the tenses of the French verb*. As we think his way of considering the subject very good, and as it has not been sufficiently, if at all, attended to by those who have written on the tenses, we shall give his illustrations as nearly as possible in his own words. He divides the tenses of the Greek verb into two classes, the principal, and the secondary. The principal tenses are, (1) the present, (2) the future, and (3) the perfect. The secondary, (1) the imperfect, (2) the aorist, and (3) the plus-perfect, each of which is formed from the corresponding primary tense. The following investigation of the French verb *lire* shows the connexion in meaning between the primary and the secondary tenses:

I. Principal tenses, which express that the action has relation to the time of speaking.

- (1) Present, *je lis*, "I am reading," i. e. at the present moment.
- (2) Future, *je lirai*, "I shall read," i. e. at some period succeeding the present moment.
- (3) Perfect, *j'ai lu*, "I have read," i. e. at some period preceding the present moment.

The whole duration of time is thus divided into three portions, the present, which is fixed, so that if you say, "I am reading," no one will ask you "when?"—and the future and perfect, which are fixed relatively to the present. For the assertion "I shall read," or "I have read," would convey a clear and intelligible idea, even though you should answer, "I do not know," or "I do not remember," to the question "when will you read?" or "when have you read?" So that the primary tenses enable us to see at once to which particular point of time,—present, future, or past,—the act relates, and are therefore absolute and independent, and express only a *simple relation* to one of the three points of time.

II. Secondary tenses, which imply a relation to some point of time other than the present.

- (1) Imperfect, *je lisais*, "I was reading."
- (2) Aorist, *je lus*, "I read."
- (3) Plus-perfect, *j'avais lu*, "I had read."

All these assertions suggest the question "when?" and if you would have your hearer understand you, the precise point of time, *when* you

* This explanation has been adopted, with some additions which do not add to its distinctness, by Mr. Mansel, in the *North British Review*, Vol. xiv. p. 55.

were reading, or read, or had read, must be stated. Accordingly, not being determined by themselves, they require some additional statement to fix their meaning; and thus they express a *double relation* or *two relations*, (1) to the past, generally, and this is determined by the forms themselves; (2) to some fixed point in the past. The primary tenses, therefore, may be called definite (*déterminé*); the secondary, indefinite or half-definite (*indéterminé* or *sémi-déterminé*). The former express only one relation, and this relation is determined by their form; the latter, two relations, of which the form determines only one.

DEFINITE TENSES.

The present expresses simultaneity	} relatively to the time of speaking.
The future posteriority	
The perfect anteriority	

INDEFINITE TENSES.

The imperfect expresses simultaneity—je lisais *pendant* que vous écriviez.

The aorist expresses posteriority—je lus *après* que vous eûtes fini d'écrire.

The plus-perfect expresses anteriority—j'avais lu *avant* que vous eussiez écrit.

Now all these tenses express *anteriority* alone, in regard to the time of speaking. The relation, in which they differ from one another, is the only one expressed by the definite tenses. It is, therefore, by a natural analogy that, in the Greek language, the imperfect is derived from the present, the aorist from the future, and the plus-perfect from the perfect, by prefixing the augment, which is the mark of past time, to these tenses, which in themselves denote simultaneity, posteriority, and anteriority.

373 This view of the case will contribute materially to the better understanding of the whole system of moods and tenses in Greek. We have seen, from what Burnouf says, that all three of the tenses which express a double relation may be called *ἀόριστοι*, or indefinite. But the second of them, which is formed from the future, is peculiarly so, from the mixture of past and future time implied in it, and therefore the Greek grammarians have particularly distinguished it by this name. Thus we find it used in cases where we should expect one of the other indefinite tenses, though never, we believe, for a definite tense. In the passage quoted from Xenophon by Burnouf (§ 357), as

an instance of its use for the perfect, it bears the proper aorist sense, or implies posteriority in reference to a fixed point of time: τοὺς θησαυροὺς τῶν πάλαι σοφῶν, οὓς ἐκεῖνοι κατέλιπον ἐν τοῖς βιβλίοις γράψαντες, σὺν τοῖς φίλοις διέρχομαι, i.e. they first wrote them down, and then left them. When the aorist expresses repetition or continuance, and thus seems to approximate to the present, it always has reference to some fixed point or circumstance, which is necessary to define it. In the same way, the optative, which is the aorist of an old future, is used to express repetitions. In any mood except the indicative the aorists are employed to denote single acts or transient time, and the first aorist conveys this meaning occasionally even in the indicative, especially in those cases where it implies that something followed a given event, and is itself completed, so that we may dismiss the subject. Compare the use of ἤνεσα and its compounds (*Gr. Gr.* Art. 427 (dd)). When deprived of its augment, as in the infinitive mood, the aorist may be used for the future after μέλλω (see Porson, *ad Eurip. Orest.* 929). The Greeks very frequently described historical events in the present tense. Similarly, we sometimes find the imperfect in a narrative, where we should expect the aorist, especially in Homer and Herodotus, the narrator representing the action as if he had been present at the time when it was going on (see *Matth. Gr. Gr.* § 505). A similar feeling gave rise to the employment of the imperfect, in the old ἀναγραφαί and in Pindar, to describe a victory gained at the public games (see Dissen, *ad Pind. Nem.* v. 5; *Thucyd.* iii. 8; v. 49, and Arnold's note on the latter passage). The same is observable in the inscriptions on works of art, as Ἀπελλῆς ἐποίησε, where Pliny (*H. N.* i. 20) gives a special explanation of the phrase, and refers it to the modesty or caution of the artists.

374 The relation between the second aorist, as it is called, and the second future, does not seem to be the same in all verbs. In some the second aorist, like the corresponding future from which it is derived, is merely a shortened form of the first aorist in -σα (above, § 371); thus we have second future βαλῶ, second aorist ἔβαλον; and as the former stands for βαλέω=βαλέσω, so the latter represents ἔβαλεον, as appears from the infinitive βαλεῖν (in Ionic βαλέειν), and the participle βαλοῦσα, Doric βαλοῖσα, Ionic βαλεῦσα. Such a first aorist as ἔμεινα is formed on the compensation principle for ἔμεινα=ἔμεινεσα. It will be recollected, that although we retain the names first future, first aorist, second future, second aorist, we do not mean that each verb was provided with such an apparatus of longer and shorter forms. Some would have the more complete tense only; others, only the contracted one; and in the same verb, certain writers

would adopt the former, while others would prefer the latter. The opinion of Herodian (*Bekker. Anecd.* p. 1290), an opinion adopted by many modern scholars (*Philol. Mus.* II. p. 205), that there is no such thing as a second future, is only so far true as this—the second future is not a distinct tense, for it is only a contraction; but there are such contracted futures; indeed they are the regular forms for verbs the roots of which terminate with a liquid; and we might go so far as to say, that every tense of the subjunctive mood is an instance of the shortened future, to which the corresponding tense of the optative stands in the relation of aorist. But besides this second aorist, which appears as the correlative tense to the second future, and may be recognised in the optative as opposed to the subjunctive, there may have been some cases in which this tense, as denoting single or transitory acts, never had the future σ - of the proper or first aorist. Whether this tense, which has an augment without reduplication or affix, is to be regarded as an aorist, or as the imperfect of the oldest semel-factive verb, it is clear that its meaning corresponds to that of the aorist, though it is differently expressed. For while the form which has the augment ξ - as well as the affix $-\sigma$ implies that the act *was* future and *is* past, or that it took place within limits, which require to be defined, the shorter form expresses much the same meaning when it indicates a transitory or momentary action completed in past time (see below, § 443).

375 From the future $\tauύψω$ is formed the desiderative $\tauυψείω$, to which again the form $\tauύψεια$ stands as imperfect; the latter is generally considered as an optative aorist, and the desire or wish conveyed by it has deprived it of all actual reference to the past, and therefore of its augment. Besides this, the formation of a new present tense from some past or future tense of a verb is one of the commonest phenomena in the Greek language: thus we have from the aorist $\xiῆκα$ the new present $\xiῆκω$, and from the perfect $τέθνηκα$ the new present $τεθνήκω$, &c.

377 The Greek grammarians acknowledge a first and second perfect as well as a first and second aorist. The first perfect is thus distinguished. When the final letter of the root of the verb is β , π , φ , or γ , κ , χ , this consonant either becomes aspirated or remains so. In all other cases the characteristic of the first perfect is $-\alpha$. The second perfect, though it occasionally admits of alterations of the root, principally by *guna*, adds nothing but $-\alpha$, $-\alpha\varsigma$, $-\epsilon$, as a termination. Some scholars think that the second perfect must be considered as older and

more organic than that called the first, as it is formed out of the resources of the root itself without foreign additions, and corresponds exactly to the proper perfects in Latin and Sanscrit, and to the perfects of the first six of the strong conjugations in old Low German. We entertain very strong doubts as to the truth of this assertion (see *Gr. Gr.* p. 185). The second perfect must be a mutilated form, for the past time implied in this tense could not be conveyed by the reduplication alone. When we compare the aorists ἔθηκα, ἔδωκα, with the perfects τεθέικα, δέδωκα, we perceive the only real difference to be that the aorists have augments, the perfects reduplication. And if we take the perfects {τετύφα, } {λέλεχα, }, we see that the termination is simply *ha*. That the Sanscrit *ç* in most cases represents a Greek *κ* we have already seen; it has also been shown how the soft sound of *s* is often substituted for the hard *κ*. Of the substitution of *h* both for *k* and *s* it is unnecessary to speak.

377 It appears then probable, from observation in the Greek language alone, that the terminations of the perfect and aorist are identical. The analogy of the Latin language renders this all but certain. The Latin conjugation is exceedingly incomplete. There are no means of expressing past time by augmentation, and very few verbs have a proper reduplicate perfect, as *tetuli* from *tollo*, *pepuli* from *pello*, *ceceidi* from *cado*. In some the syllable of reduplication is completely lost, as in *fidi* from *fido*; in others, the length of the penultima is all that remains of the original form of the perfect, as in *lēgi* from *lēgo* &c. In a few cases we still have both forms: thus, we have both *tetūli* and *tūli*, both *tūtūdi* and *tūdi*; and these may be properly termed *perfects*, for they are equivalents, more or less mutilated indeed, to the corresponding Greek tense. Another perfect, so called, ends in *-si*, which is never reduplicated, and therefore seems more entitled to the name of first aorist. It is true that the flexion is that of the other perfects (*-i, -isti, -it, -imus, -istis, -ērunt*), and it would be easy to say that this is a form of the perfect which has lost its reduplication, just as the past tense in Latin has always lost its augment. The fact, however, that we have a future in *-sim*, as *faxim* (*fac-sim*), corresponding to this tense in *-si*, furnishes a sufficient reason for believing that the latter was an indefinite tense or aorist. We shall not be able to settle this question completely without examining the inflexions of the real or reduplicated perfect. The most undoubted and ancient form of this tense is furnished by the verb *fuio* (Gr. *φύω*), which appears both as *fio* and *fuo* (Gr. Gr. Art. 321). The latter, still farther shortened into *bo*, furnishes the usual future of all vowel verbs;

thus *ama-bo*=*ama-fuo*, &c.; its imperfect, originally *e-fuam*, under the form *e-bam*, appears as the adjunct to the imperfect of all verbs, not excluding *fio* itself in the later condition of the language; and its perfect *fūvi*=*fufui*, under the weakened form *fui* or *ui* or *vi*, furnishes a perfect to all verbs ending in a vowel; thus *amavi*=*amafui*, &c. (see Bopp, *Vergl. Gramm.* p. 804; *Varron.* pp. 353 sqq.). Now as *fufui* may be properly compared with *πέφονα*, as *i* is the regular exponent of guttural vocalization, as the guttural, before it subsides into *i*, is generally softened into *s* and *h*, and as we find *s*, *k*, and *h*, in the aorist and perfect of Greek verbs, we have abundant reason to believe that *fufui* stands for *fufusa*, which is again an offspring of *fufuka*. If then we restore the regular inflexions of the assumed *fufusa* we shall get:

fufusa-[*m*]=*fufuis*=*fufui*
fufusa-*tha*=*fufuis-ti*
fufusa-*t*=*fufui-s-t*=*fufuit*
fufusa-*mus*=*fufui-s-mus*=*fufuimus*
fufusa-*tis*=*fufuis-tis*
fufusa-*nt*=*fufue-s-nt*=*fufuerunt*

If we admit this transposition and substitution, which seem to be justified by general principles and by the analogy of the French change of *l* through *ul* into *u*, we must apply the same explanation to all regular perfects. Thus *tutudi* stands for *tutudis*=*tutudsa*, &c. But it is manifest that the forms in *-si* contain something more than a mere *s*. According to the principle stated above (§ 372), the future in *-sim* must be antecedent to the tense in *-si*, supposing that this latter is an aorist. Now if we compare *fac-sim*, for example, with *sim*=*siem* (*Varron.* p. 345), we shall feel justified in concluding that *fac-sim*=*fac-siem* is analogous to the desideratives in *-σειω*, and that *dic-si*, for example, corresponds rather to *δείξεια* than to *ἔδειξα*. The early loss of the primitive system of augments and reduplications in the Latin language, has introduced a mode of extending the affix or person-endings, which we shall see also in the latter Greek imperative. We regard this as springing from a false sense of analogy: for the affix *s-* does not denote past time but future. We must not, however, forget that these subsequent extensions invariably presume a neglect or ignorance of the original significance of formative elements; consequently, that the procedure is entirely conventional and arbitrary. In point of fact, there is no more difficulty in understanding the transition of *e-dixi*, *e-dixis*, &c. into *dixi*, *dixisti*, &c. than in seeing the reasons for the change of the active *τυπτε-τ-ω* into the passive *τυπτε-σθ-ω*, on the analogy of *τύπτε-τ-ον*, *τυπτε-σθ-ον*. On the whole,

then, we may fairly conclude that the suffix of the future, aorist, and perfect, as well in Greek as in Latin, is the same, being always some representative of the second pronoun; that in the case where this characteristic appears to be lost, it has past into *h* or *i*; and that while the Greek distinguishes the aorist and perfect from the future by augment or reduplication, in Latin the proper distinction has been lost, the only differences which remain being accidental and not essential.

378 This view of the case explains not only such futures as *τανύσω* for *τανύσω*, &c., and *βέτομαι* for *βίτομαι* = *βίτομαι* (root *βιF*, Latin *viv-o* = *qvivq-v-o*, above, § 112); and such aorists as *ἔχεν* or *ἔχεα* for *ἔχεFα* (root *χεF*); but also the mutilated perfects like *οἶδα*, and those forms to which the participial nouns in *-vĩa* (*ἄγνις*, &c., § 296) would naturally be referred. We are led, however, by the result of this investigation, to a special inquiry respecting the original form of the *plusquamperfectum*. As *ἔχεα* and *οἶδα* presume a lost *σ*-, it might be inferred that *ἐτετύφεα* stands for *ἐτετύφεα* = *ἐτε-τύπ-σεσα* from *τέ-τυφα* = *τέ-τυπ^(h)α*. It has been observed above (§ 347), that in the present *τίθημι*, and therefore in the imperfect *ἐτίθει* for *ἐτίθην*, the root *θε-* is connected with the person-ending by an intervening *α*. In the other persons we generally find *ἐτίθης*, *ἐτίθη*. As *ἐτίθεις*, *ἐτίθεις* are presumed in the Attic forms *ἐτίθεις*, *ἐτίθει*, and as this combination generally implies an included *γα* (§ 116), we may conclude that the root *θε-* is strengthened in the present and imperfect by this pronominal addition. Now in the *plusquamperfectum* we not only find *ἐτετύφεα*, *ἐτετύφεε*, but the other persons also end in *-εας*, *-εαμεν*, *-εατε*, *-εαν*; so that *ἐτετύφεα* stands for *ἐτετύφειν* or *ἐτετύφεαν* = *ἐτε-τύπ-σε-σα*, and not merely for *ἐτετύφα-ν*, for then the *ε* would be inexplicable. The same conclusion would be deduced from the form *-εια* for *-ειν*, which is found in inscriptions. Now as we should expect *à priori* that the *plusquamperfectum* would differ from the perfect only in the augment prefixed, we must regard the double addition of the future or aorist affix as the result of a later and abnormal analogy. The Latin verb, however, fully shows us the possibility of such a procedure. If we compare *fui* = *fuesa-m* with *fuera-m* = [*e*] *fuesam*, we shall recognise the last faint traces of the legitimate formation; and we see of course the same regularity in the inflexions of those verbs which form their perfect and *plusquamperfectum* with the aid of these tenses. Here, however, the parallelism of the definite and indefinite tenses terminates, and even in the substantive verb the transitions are effected by accretions of the affix: thus from *fuera-m* = *fuesiem* we have *fuisse-m* = *fuesesiem*; and in the verbs which have the aorist-perfect in *-si*, the

same abnormal formation is found even in the indicative; thus from *rexi* we have plusquamperf. *rexeram*=*reg-se-sam* and *rexerim*=*reg-se-siem*, which is again lengthened into *rexissem*=*reg-si-se-siem*. From this use of the element *s-* to transfer the definite tense into the corresponding indefinite, it might seem that the same suffix is employed to indicate both future and past time: but this is not exactly the case. In the formation of the aorist from the future, it was intended to express posteriority in relation to some past event (above, § 372), and we observe that this suffix is never used by itself to signify past time in Greek; this is always done by the augment. The want of an augment in Latin, and the gradual loss of a regular future by the substitution for it of a subjunctive, gave this termination the improper influence which it exerts in that language.

379 The form which some of the tenses present in the Greek passive has occasioned difficulties which no philologist has hitherto been able to surmount. We conceive that the general principles which we have laid down at the beginning of this chapter will afford a satisfactory explanation of these troublesome phenomena. It has been mentioned, that in Sanscrit there are two forms of verbs, considered according to their person-endings; the one is called *parasmaipadam*, or transitive, and has endings in the instrumental case; the other, called *âtmanêpadam*, is middle or deponent, and has endings in the locative case. The passive voice is formed from the *âtmanêpadam*, by inserting the pronominal syllable *ya* between the root and the ending. Now we find that, in Greek, the present tense of the *âtmanêpadam* is used as a passive and also as a middle, and the passive forms of the other tenses generally bear the same relation to the active forms that we find in the present passive or middle, as compared with the same tense in the active; the difference, namely, is only in the ending. In the perfect and plusquamperfectum the characteristic σ , κ , or h is frequently dropt altogether, as we have seen in the case of the second perfect and second aorist. The form $\epsilon\tau\psi\acute{\alpha}\mu\eta\nu$ from $\epsilon\tau\psi\alpha-(\mu)$, which we should expect as the passive aorist, is never strictly passive, except in those cases where the reflexive and passive significations are interchanged or become commutable. The forms actually used as passives, $\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$, $\epsilon\tau\acute{\upsilon}\pi\eta\nu$, &c., have the active person-affixes throughout all the moods, and philologists are quite at a loss to determine whence they have got their uniformly passive signification. Bopp (*Berlin. Jahrb.* 1827, pp. 284 foll.; *Vocalismus*, pp. 53 fol.) has suggested two methods of explaining the former. He conjectures that it is either formed of the verbal adjective and the substantive verb ($\epsilon\tau\acute{\upsilon}\phi\theta\eta\nu$ for $\tau\upsilon\pi\tau\omicron\varsigma \tilde{\eta}\nu$), or by an addition to the root of the aorist $\epsilon\theta\eta\nu$, on the sup-

posed analogy of the Gothic *sókidêdum*, "seek-did-we," and the Latin *vendo*. Pott (*Etymol. Forsch.* i. p. 47) prefers the former of these explanations; Kuhn (*de Conjugation in -μ*, p. 67) is inclined to adopt the latter. On a former occasion (*Annals of Oriental Literature*, p. 39) Bopp proposed a different conjecture, which shows to what extremities despairing ingenuity may be driven. He suggested that *ἐτύφθ-ην*, *ἐδόθ-ην*, &c., may proceed from the passive participles *τυφθ-είς*, *δοθ-είς*, substituting for the termination *-είς* the person-terminations *-ην*, *-ης*, *-η*, &c. But how does the syllable *τυφθ-*, with the active participial ending, come to be a passive participle? And how does it happen that *τυφθείς* is explicable, and *ἐτύφθην* not? In fact, this explanation tells us nothing: he might just as well have said that *ἔθ-ην* was formed from *θ-είς*, by the substitution of *-ην* for *-είς*! Perhaps, however, Gräfe's remark (p. 114) is even more absurd than any of these. He says that *ἐτυπον* is an imperfect of the *-ω* conjugation, *ἐτύπην* of the conjugation in *-μ*, as if the distinction between the conjugations in *-ω* and *-μ* could in any sense correspond to a difference of voice!

380 That there is some foreign element in forms like *ἐτύφθην*, every one is constrained to admit at first sight, but no one has attempted to explain *ἐτύπην* otherwise than as a mutilated form of *ἐτύφθην*, except Bopp, who considers it as a compound with the substantive verb *ἦν* (*Vocalismus*, p. 54). This misconception of the second aorist passive has led to some extraordinary classifications in the commonest verbs. To take one of the most obvious instances, the verb *ἵστημι*, root *στᾶ*, which means "I cause to stand," has a transitive future and aorist *στήσω*, *ἔστησα*, regularly formed from it. Now in every grammar we find in the paradigm of the active voice an aorist and perfect *ἔστην*, *ἔστηκα*, which bear a passive signification ("I stood" or "was caused to stand") throughout all the moods: whereas *ἑστάθην*, which is a synonym of *ἔστην*, is not placed in the active but in the passive paradigm. It is true that at first sight *ἔστην* seems to correspond to *ἔθην*, &c., but if we compare *στήναι*, *στήδι*, *ἔστημεν*, *στάς*, &c., with *θαῖναι*, *θές*, *ἔθεμεν*, &c., and *ἔστηκα* with *τέθεικα*, we shall be constrained to admit that these are widely different forms, and that the root *στᾶ* has suffered some change in these tenses which has not been experienced by the root *θῆ* in the others. But *ἐτέθην*, which stands for *ἐθέθην* (one of the aspirates being necessarily abolished, and the second retained in preference to the first in consequence of the importance of the termination), corresponds to the other aorist *ἑστάθην*; and *ἔστην*, *στήσομαι*; *ἑστάθην*, *σταθήσομαι*; are perfectly analogous to *ἐτύπην*, *τυπήσομαι*; *ἐτύφθην*, *τυφθήσομαι*; so that *τίθηναι* must be considered as having lost its second aorist passive, and *ἔστην*, *στήσομαι*, must be

placed by the side of *ἑστιάθην, σταθήσομαι*, in the passive paradigm. We find other instances of a loss of the second aorist, and we must determine from the meaning and the form in the plural and other moods, whether the active or the passive aorist is the one wanting. Thus *ἔδων* is not only active in signification, but we see from *ἔδομεν, δός, δούς, &c.*, that the form contains no foreign element; whereas when we find *φύω (φύμι), φύσω, ἔφυσα*, active; but *ἔφυν, πέφνκα*, passive: *δύω, δύσω, ἔδυσα*, active; *ἔδυν, δέδνκα*, passive: *σβέννυμι, σβέσω*, active; *ἔσβην*, passive: *βήσω, ἔβησα*, active; *ἔβην, βέβηκα*, passive: &c., and also observe the forms *φῦναι, ἔδῡμεν, ἔσβημεν, βίγναι*, we conclude that in these cases the root has received some accession, and that the verb has no short form of the active aorist.

381 Having vindicated the claim of these intransitive aorists in *-ην, -υν*, to rank with the passive forms in *-θην*, we must endeavour to point out the pronominal element which has given them their passive signification. This is, in our opinion, the second pronoun, under that form which indicates the locative case. It is used to form passive and other derivative verbs in Sanscrit, such as denominatives and causals. That it was of most extensive application in Greek, we shall see in another chapter. In almost all cases, however, it has been absorbed by one or other of the various euphonical artifices which the fineness of the Greek ear necessitated. Among other instances of this, it may be easily seen, that it lies hid in the derivative verb-endings *-άω, -όω*, in many of those in *-ύω*, and also perhaps in some of those in *-έω* (Bopp, *Vergl. Gramm.* p. 727). A similar absorption has taken place in the optative of verbs in *-ύω, -νμι* (Buttmann, *Ausf. Sprl.* § 107, *Anm.* 36), and we have seen something of the kind in *ἤμερος* for *δγά-μερος*. We consider, then, that *ἔστην, ἔφυν, ἔδυν, &c.*, stand for *ἑστιάγαι, ἐφύγαμι, ἐδύγαμι, &c.*, respectively. The Latin language affords us an excellent example of the way in which this pronominal formation can give a passive sense without the addition of an *ātmanēpadam* affix. It seems that in Latin the contracted verbs in *-ao* agree in their uses with the Greek in *-έω*, and those in *-eo* with the Greek in *-άω* or *-γω*. The Greek conjugation in *-εω* was, as we shall see, that which was always adopted in forming verbs from compound nouns; thus, *εὐεργέτης* made *εὐεργετέω, &c.* The same was the case with the Latin verbs in *-ao*: thus from *latificus* we have *latificāri, &c.* Again, we find that many active verbs in Latin, either uncontracted or contracted in *a*, have a neuter or passive verb from the same root which is uncontracted, or, what is more usual, contracted in *e*. We will take a few instances: 1st, active uncontracted, passive contracted in *e*; active *pendere*, passive *pendere*; active *scandere*, passive *scatere*; active

pandēre, passive *patēre*; active *sistēre*, passive *stāre* (this is perfectly analogous to ἵσταναι, ἕστανν); active *jacēre*, passive *jacēre*; 2nd, active contracted in *a*, passive contracted in *e* or uncontracted; in this case, it will be observed, the active verbs are all derivatives from the verbal nouns of the neuter verbs: active *sedāre*, passive *sedēre*; active *parāre*, passive *parēre*; active *liquāre*, passive *liquēre*; active *fugāre*, passive *fugēre*. The same method which the Latin language has applied in the formation of complete verbs has been adopted in Greek for the construction of one tense, and the forms dependent on it; and there are traces of the same insertion in certain verbs, for example, in *πονάω*, as distinguished from *πονέω* (Böckh, *ad Pind. Pyth.* iv. 236; Hermann, *Dial. Pind.* p. xv).

382 The aorist in *-θην* is easily explained. It contains the element *θ* in the locative form *θι*. We might say then that the form in *ι* was the ultimate state of that in *thi*, just as *αὐτόν* = *αὐτό-ι* stands for *αὐτό-θι*; for there is no reason, etymologically speaking, why *θι* and *ι* should not be considered as identical, any more than there is for distinguishing between the noun-endings *-σις*, *-ια*; the adjectives in *-σιμος*, *-μος*; and the genitives in *-(ς)ιο*, *-ιο*. But we must be careful not to confuse between the locative pronoun *θι*, and the simple element *θ*, which is used as a verb-root in Greek, Latin, and German, to signify action; nor must we consider the locative *ι*, which is synonymous with *θι*, as identical with the verb-root *ι*, which is used in a similar manner in opposition to *d-*, *θ-*. When we compare *per-eo* with *per-do*, and this last with *πέθ-θω*, and when we recollect the corresponding analogies, such as *inter-eo* contrasted with *inter-ficio*, *ven-eo* with *ven-dico*, *venum-do* and *ven-do*, &c., we must be led to conclude that all these verbs are compounds in which *eo*, "I go," is opposed to *do*, "I put," &c., and that the latter are entirely analogous to the forms in *-so*, *-sivi*, which we first explained in another work (*Varron.* p. 352). In the indicative present of the verbs in *-so*, such as *cap-es-so* = *capere sino*, *arces-so* = *accedere sino*, &c., the form *sino* has lost the inserted nasal which distinguishes this tense from the perfect, just as the word *pons*, discussed above (§ 295), refers us to the original form of *pô-no* = *pos-no*, in which the formative *n* has not yet made its appearance. The verbs in *-do* keep only the shorter form of the inflexions, which has been extended in the separate verb *do*, *das*, *dat*, but the perfect remains to vindicate the relationship. And the verbs compounded with the separable *-eo* are distinguished from the neuter verbs mentioned above (*pend-eo*, *pat-eo*, *sed-eo*, &c.), both by the conjugation of the present, and by the form of the perfect, which correspond to *eo*, and not to the ordinary verbs of the so-called second conjugation.

But if *per-do* is truly represented by $\pi\acute{\epsilon}q-\theta\omega$, we must recognise a verbal compound in the latter, and the same reasoning will apply to the other cases in which the element θ - appears in its simple form, such for instance as $\pi\epsilon\lambda\acute{\alpha}-\theta\omega$, $\phi\lambda\epsilon\rho\acute{\epsilon}-\theta\omega$, $\nu\epsilon\mu\acute{\epsilon}-\theta\omega$, $\theta\alpha\lambda\acute{\epsilon}-\theta\omega$, $\varphi\alpha\acute{\epsilon}-\theta\omega$, $\varphi\theta\iota\nu\acute{\upsilon}-\theta\omega$, &c. Besides these we have, but always in the past tense, such forms as $\acute{\epsilon}\delta\iota\omega\kappa\alpha\theta\omicron\nu$ from $\delta\iota\omega\kappa\omega$, &c., with regard to which the question has been raised, whether they are aorists or imperfects (Elmsley, *ad Eurip. Med.* 186; Pierson, *Mæris*, p. 118; Ruhnken, *Timæus*, p. 87; Hermann, *ad Soph. Œd. Col.* 1619): we are quite sure, as well from the meaning as from the analogy of the presents in $-\theta\omega$, that they are all imperfects of lost verbs in $-\theta\omega$. Now it must be obvious on the slightest consideration that causative verbs in $-\theta\omega$ can have nothing to do with passive forms in $-\theta\eta\nu$. And it is also obvious that any true explanation of $\acute{\epsilon}\tau\upsilon\varphi\theta\eta\nu$ must also be applicable to $\acute{\epsilon}\tau\upsilon\pi\eta\nu$. We conceive that we have correctly analyzed these aorists, when we identify the interpolated elements with the synonymous locatives $\theta\iota$ and ι respectively. According to this, $\acute{\epsilon}\tau\upsilon\varphi-\theta\eta\{\mu\}$ = $\acute{\epsilon}\tau\upsilon\pi-\eta\{\mu\}$ will mean "there was a single act of beating performed *close at hand* by me," so that these tenses expressed the limitation of the agency by a formative insertion instead of an inflexion of the person-ending. It is scarcely necessary to add, that, while the σ -, κ -, h -, of the future, aorist, and perfect active, affect the verb-root itself with an expression of future and approximate time, the interpolated $-\theta\eta$, $-\eta$ of the passive aorist confine the instrumental case of the person-ending to a home-circle of limited agency, so that instead of the mere locality which is expressed by the forms in $-\mu\alpha\iota$, $-\mu\eta\nu$, we have an expression of locality added to that of instrumentality signified by the case of the person-ending. In fact, $-\eta\mu$ or $-\theta\eta\mu$ becomes equal to $-\mu\eta\nu$.

383 It is of course possible that the pronominal element θ - may be connected with the verbal root $\theta\acute{\epsilon}$ (§ 224); but to imagine, with Bopp and Pott, that any tense of $\tau\acute{\iota}\theta\eta\mu$ — $\acute{\epsilon}\theta\eta\nu$ for instance—is added to the root or crude-form of the verb, would be to reverse the natural processes of language. The idea of location is intimately connected with that of the verbal root $\theta\epsilon$ -, and we can easily conceive that the locative $\theta\iota$ has extended its influence to this verb as well as to the aorist in question, and to the passive infinitive. It has been mentioned before that $\tau\acute{\iota}-\theta\eta\mu$ = $\tau\iota-\theta\acute{\epsilon}\alpha-\mu$ (§ 347), and $\theta\eta$ = $\theta\epsilon$ or $\theta\iota\alpha$ (§ 116). Consequently, the root of $\tau\acute{\iota}\theta\eta\mu$ is rather the locative $\theta\iota$ - than the simple element θ ; and while we have $\delta\omicron$ = $\delta\theta\omicron$ in $\delta\acute{\iota}\delta\omega\mu$ = *dadâmi*, we must recognise $\theta\iota\alpha$ = *dha* in $\tau\acute{\iota}\theta\eta\mu$ = *dadhâmi*. We also discern the simple element in $\mu\acute{o}\chi-\theta\omicron\varsigma$, "a labour," "something great to do;" compare the first syllable with $\mu\acute{o}\gamma-\iota\varsigma$, $\mu\omicron\gamma-\acute{\epsilon}\omega$, $\mu\acute{\epsilon}\gamma-\alpha\varsigma$, *magnus*,

μαί (Hesych.), *macte*, Sanscrit *mahat*, *mahita*, "worship," &c. Also in *δομα-θός*, "a thing done in vows" (*δομοί*). But we have the longer form with a kind of passive sense in *ἔσ-θης* from *ἐν-νυμι* for *ἑσ-νυμι* (Sanscrit *vas*, Latin *ves-tis*), and in *ἔσ-θίω* (root *ἐδ-*), where we find the locative *θι*, as in the first aorist passive. That this last has for its future *ἔδομαι*, clearly of a middle form, would of itself be some proof that the word is not altogether of an active nature. The following considerations add much weight to this view. We find that the cognate word *πίνω* has only the future *πίομαι*. These two futures are, as we shall show in the following chapter, nothing but subjunctives, like *θείομαι* for *θέωμαι*, *βέλομαι* or *βέομαι*, &c. We are convinced that *πίνω*, as well as *ἔσ-θίω*, is virtually a deponent verb; in other words, that although the action may pass on to the object eaten or drunk, yet, the agent being considered as the object benefited, he is spoken of in the locative and not in the instrumental case. For this reason we find that all verbs in Greek and Latin, which, though they may express an action, confine the benefits or results of that action to the agent, are middle or deponent in form, and, for the same reason, the Greeks use the middle voice to express that a person is not the instrument, but the cause, of an action. This explains the middle or deponent use of *vescor*, *γεύομαι* (as opposed to *γεύω*), *utor*, *fruor*, *χρῶμαι*, *nanciscor*, *δέχομαι*, *adipiscor*, *sortior*, &c.; also of verbs denoting the exercise of the senses, as *αἰσθάνομαι*, *contemplor*, *θεῶμαι*, *ὀσφραίνομαι*; *conspicari*, *intueri*, *ἀποροῦσθαι*, &c.; of words implying mental emotions, as *mirari*, *vereri*, *letari*, &c.

384 In Greek we find certain words of this class with the present tense of an active, but the future of a deponent form; thus *ἀκούω* makes *ἀκούσομαι*; *θανμάζω*, *θανμάσομαι*; *θνήσκω*, *θανοῦμαι*; *πάσχω*, *πέσομαι*; &c. It is easy to understand this: when we speak of something that will make an impression upon our senses or feelings, or, in general, befall us, as future, we consider ourselves as merely the objects of these outward impressions or accidents; but when we speak of their present effect, we consider ourselves as agents or inchoatives in respect of them. If any one says, "I am hearing," he asserts that he is exercising that sense; if he says, "I shall hear," he says merely that there will be a sound or noise: again, if he says, "I am dying," he speaks of his being on the way towards death, and therefore, an inchoative verb like *θνήσκω* might very well be used: if he says, "I shall die," he merely states that his death will take place, that he will be dead (*θανεῖται*), in which event he cannot be considered as an actor at all. The same principle has extended itself even to the primitive verb of existence: for while *εἰμί*=*ἔσ-μι* has lost its

original future ἔσ-σο-μι, which is now represented only by the subjunctive ᾗ=ἔσ-ίω=ἔσ-λο-μι, we find in constant use ἔσσομαι or ἔσομαι, which means, "there is or will be existence for me." Some such method might be adopted to explain all those numerous instances in Greek, where we find an active present with a deponent future (*Gr. Gr.* 344). M. Burnouf justly remarks (*l. l.* § 204) that the active verbs with middle futures, are precisely those which, in the French language, are reflected in form but not in sense; thus, σιγήσομαι or σιωπήσομαι is *je me tairai*; βήσομαι, *je m'en irai*; θανατάσομαι, *je m'étonnerai*; ἀμαρτήσομαι, *je me tromperai*; οἰμώξομαι, *je me lamenterai*; σπουδάσομαι, *je m'étudierai* à; &c.

385 It is worthy of observation that the passive futures formed from the aorists in -ην and -θην, have person-endings of the middle form. It is an irregularity that they should be formed from the aorists at all, and we can only explain it on the supposition that they were first constructed when the future middle, as it is called, which is often used in a passive sense (Monk on *Eurip. Hippolyt.* 1458, above, § 379), was appropriated to the active verb, and an independent passive future was necessary (*Journal of Education*, iv. p. 158); at all events, they must be considered as subsequent to the other forms of the future.

386 Another instance of the formation of a tense by the addition of a suffix used to form a set of verbs, is furnished by the iterative tenses in -σκον. This ending is affixed to the imperfect and to both aorists of the indicative, and the augment is omitted; thus ἔτυπτον makes τύπτεσκον; ἔτυψα, τύψασκον; and ἔλιπον, λίπεσκον; and so also in the passive. This mode of forming tenses is peculiar to the Ionians, who were in the habit of omitting the augment of the historical tenses in their descriptive poetry, and from them the custom was introduced into the long narrative speeches which the epic element of the Athenian drama permitted. These tenses, according to Buttmann (*Ausführl. Sprl.* § 94, *Anm.* 3), denote not a continued, but a repeated action. The iterative formed from the imperfect implies occasionally an action of some duration frequently repeated—as in Herod. iii. 119: ἡ γυνὴ κλαίεσκε καὶ ὀδυρέσκετο—at other times a momentary action repeated, Herod. i. 185: ἐπιτείνεσκε, ὅπως μὲν ἡμέρη γένοιτο, ξύλα τετράγωνα—τάς δὲ νύκτας τὰ ξύλα ταῦτα ἀπαίρεσκεσκον: the iterative formed from the aorist conveys the latter meaning only; Herod. iv. 130: ὅπως—καταλίποιεν, αὐτοὶ ἂν ὑπεξήλαννον, οἱ δὲ ἂν Πέρσαι ἐπεληθόντες λάβεσκον τὰ πρόβατα. The aorist iteratives occur very seldom, and those from the first aorist are never found in prose. There is one instance in Herodotus (iii. 17) where the word

ἄρδεσκε is used as an imperfect, but, as Buttmann remarks, though continuation in *time* is implied, there is still a signification of repetition in *space* in this passage. It is also true, though Buttmann has not remarked this, that the imperfect is used in Attic prose as an iterative, in connexion with ὁπότε and the optative: as, for instance, Xen. *Anab.* iv. 5, § 25: ἔδει ὁπότε τις διψῶη, where certainly a repetition is implied (*Gr. Gr.* 580). But the fact is, that the ideas of repetition and continuance are intimately connected, the former being related to the latter as the idea of a series of points is to that of a line; and therefore as the generating or suggesting idea is to the idea suggested or generated. We have shown elsewhere that the Hebrew tense which indicates continuous time, is often used as a future (*Maskil le Sophér*, p. 28), and it is well known that *esco* appears as the future of *sum*. No one needs to be told that the future is by its nature inchoative, and that continued actions involve a series of recommencements.

387 There is, as well in the Greek as in the Latin language, a numerous class of verbs ending in -σκω. Buttmann is inclined to consider these terminations as totally different from the iterative preterites of which we have been speaking (*Ausführl. Sprl.* § 94, 4, note); but there seems to be a sufficient similarity of meaning in the two cases, to justify us in the belief that both formations owe their origin to the same principle, although the original meaning of the ending seems in the case of the verbs in -σκω to have been split up into a number of subordinate significations. The sense of the Latin verbs in -sco is generally inchoative: *cre-sco, gli-sco, quie-sco, na-scor, no-sco, di-sco, sci-sco, ira-scor, paci-scor, puera-sco, tenera-sco, illuce-sco, grande-sco, mature-sco, expergi-sco, contice-sco*, &c. It is to be remarked, that not one of these keeps the -sco-form in the perfect; which is *crê-vi, quîê-vi, contic-ui*, &c. Pott has truly remarked (*Etym. Forsch.* i. p. 56), that many Greek verbs in -σκω, and more than people generally suppose, are genuine inchoatives: he instances ἡβά-σκω, γηγά-σκω, γενειά-σκω, κυῖ-σκω and κυῖ-σκομαι, θνή-σκω (Æolic θναί-σκω), "to be taken in death," μι-μνή-σκομαι (Æolic μι-μναί-σκομαι), γι-γνώ-σκω. In others this meaning is less clearly seen, as ἀλθί-σκω, "I make sound," ἰλά-σκομαι, "I make myself gracious," γαννύ-σκομαι, "I become merry," ἀλί-σκομαι, "I fall into the enemy's hands." The following have a causative signification, μεθύ-σκω, πιπί-σκω, γαμί-σκω and γαμί-ζω, πινύ-σκω and πινύσσω, διδά-σκω, ἐπιβα-σκέμεν, πιφαύ-σκω and πιφά-σκομαι, ἀναβιώ-σκομαι, μιμνή-σκω, ἀρξέ-σκω, &c. Now it is sufficiently obvious that the only difference between an inchoative and a causative is this, that the one is a passive, the other an active relation. But the idea of iteration or

repetition presupposes the idea of a beginning, and the very distinction between an imperfect and an iterative preterite is, that the former presumes a line, the latter a sequence of points, the former unbroken continuation, the latter a series of recommencements.

We find an analogous ending, with a similar meaning, in nouns derived from verbs; thus we have *δίσκος* from *δικεῖν*, *λέσχη* from *λέγειν*, *αἶσχος* from *αἰδοῦμαι*: in the last two instances the *κ* is aspirated on the compensation principle, as in *πά-σχω*, root *πενθ-*; for the root of the former is *λεγ-* or *λεῖ*, as we shall show hereafter, of the latter *Φαιδ-*, Lithuanian *gēda*: the first seems to stand for *δικ-σκος*, or the *κ* has been dropt, as in *λά-σκω* (*λακεῖν*), *di-sco* (*doc-ere*), *μί-σγω*, *mi-sceo* (*μυῖναι*), *ἴσχω* (*ἔχω*), (above, § 219).

The pronominal roots *sa*, *ka*, are ultimately the same; as tense-endings we have established their identity. If, then, our view of the termination *-σκ* is correct, this is a junction of two forms of the same element, just like the very common pronominal endings *-n-t*, *-tā-nā*, &c.; and the principles already explained will enable us to understand how a compound signifying successive proximity may be used to express the ideas of inchoation, continuance, repeated action, growth and causation. As the locative *θι* may become a verb root, and denote the act of placing, so *σκ-* is found as the element of a set of words which denote progression by successive steps. Such are *σάλλω*, *σάξω*, *σέλω*, *scando*, *scala*, &c. (See Kenrick, *Herodotus*, p. 24.)

CHAPTER III.

THE MOODS AND PARTICIPLES.

388 Distinctions of mood are rather syntactical than etymological. 389 (1) *Subjunctive and optative*. Forms of the subjunctive. 390 Explanation of the optative *ι*. 391 Subjunctive and optative related as future and aorist. 392 Different forms of the future. 393 The relations of tense between the subjunctive and optative are indicated by their syntactical use. 394 Especially by the construction of *οὐ μή*. 395 Correspondences of the future and subjunctive in hypothetical sentences. 396 Their appearance in the same final sentence. 397 Use of the optative to express a wish. 398 The subjunctive and future interchanged in Latin. 399 Sanscrit forms. 400 Subjunctive and optative appear as differences of tense in modern languages. 401 (2) *Imperative and infinitive*. The former distinguished by its person-endings only. 402 Active person-endings of the Greek imperative. 403 Passive person-endings. 404 Sanscrit imperative. 405 Greek infinitive. 406 Latin infinitives. 407 Sanscrit infinitive. 408 Connexion between the imperative and infinitive. 409 This is especially manifested in the false analogy which led to the passive forms of the imperative. 410 The three different forms of the infinitive active are the locatives of three verbals. 411 The Greek infinitive passive. 412 Latin and Sanscrit forms. 413 (3) *Participles*. Forms in *-nts*. 414 Perfect participles. 415 Origin of the present participle. 416 Infinitive and participle, how related. 417 Adjectives and participles. 418 Teutonic infinitive—a declinable participle. 419 Latin gerunds and supines. 420 Participles used absolutely in Greek, Latin, and Sanscrit. 421 *Paradigms*. 422 I. Greek verb, *τύπτω*. 423 II. Sanscrit verb, *tudāmi*. 424 III. Latin verb, *tundo*.

388 **T**HE distinctions of mood and tense are due rather to the methodical language of syntax than to any essential varieties in the forms themselves. The imperative mood is merely the indicative with a peculiar affection of the person-endings, and the infinitive is merely a fixed or adverbial form of the participle, which again is an adjective derived from the third person plural of the present indicative, just as *δηρόσιος* springs from the genitive of *δῆμος*. With regard to the subjunctive and optative, although it is customary in Greek Grammars to class them as distinct moods, having tenses of their own, it has long been felt by scholars, on syntactical grounds, that, considered in their relation to one another and to the other moods, they must be regarded as differing in tense only. It has also been observed that the person-endings of the subjunctive correspond to the primary forms, or those of the primary tenses, while the person-endings of the optative always agree with the secondary forms, or those of the historical tenses

(Buttmann, *Ausführl. Sprl.* § 88, 3, 4). A more exact etymological and syntactical examination of the whole question will show clearly, that, in the oldest form of the language, these moods have no right to a separate classification, and at the same time enable us to point out the real connexion between them.

389 (1) SUBJUNCTIVE AND OPTATIVE.

The form which the subjunctive generally presents differs from the indicative in the following points. Where the indicative has ω , ov , o , the subjunctive has ω ; where the indicative has ϵ , $ει$, η , the subjunctive has η , η : the α of the first and second persons of the first aorist, active and middle, become ω and η respectively. There is no reason to believe that there is any more essential difference between the ω and η of the subjunctive, than there is between the o and ϵ of the indicative; as the two latter represent the short $\check{a}$ in Sanscrit, the two former may be considered as substitutes for the long $\bar{a}$, which is the characteristic of the *Lét* or subjunctive mood in the Vêda-dialect; and in every case we must conclude that an original ι - or vocalized σ - is absorbed, or more or less imperfectly represented by this long vowel. This $\bar{a}$ is found in the subjunctive of the Doric dialect: for instance, we have $\iota\sigma\tilde{\alpha}\nu\tau\iota$ (*Corpus Inscript.* Vol. II. p. 641, no. 3053); $\epsilon\pi\iota\sigma\tilde{\tau}\tilde{\alpha}\nu\tau\iota$ (*Ib.* p. 413, no. 2556, l. 68); $\epsilon\tilde{\rho}\tilde{\alpha}\tau\alpha\iota$ (Pindar, *Pyth.* iv. 92=164); $\beta\tilde{\alpha}\mu\epsilon\varsigma$ (Theocr. xv. 22); see Kuhn, l. l. p. 39. In the older writers, the root-syllable alone is changed (sometimes by the addition of an ι), the connecting-vowel not being affected, though this seems to take place only in the dual and plural; thus we have $\beta\epsilon\acute{\iota}\omega\mu\epsilon\nu$, $\theta\epsilon\acute{\iota}\omega\mu\epsilon\nu$, $\sigma\tau\epsilon\acute{\iota}\omega\mu\epsilon\nu$, $\pi\alpha\rho\sigma\tau\acute{\eta}\tau\epsilon\tau\omicron\nu$, $\delta\acute{\omega}\omega\mu\epsilon\nu$, $\gamma\acute{\nu}\omega\omega\mu\epsilon\nu$. In the passive this may take place in the singular, as in $\acute{\alpha}\pi\omicron\theta\epsilon\acute{\iota}\omega\mu\alpha\iota$. In the active we occasionally find both root-vowel and connecting-vowel affected by *guna*, as in $\sigma\tau\acute{\eta}\eta\varsigma$, $\xi\mu\beta\acute{\eta}\eta$, $\theta\epsilon\acute{\iota}\eta\varsigma$, $\xi\phi\acute{\epsilon}\eta\varsigma$, $\delta\acute{\omega}\eta$, &c. Buttmann supposes the existence of subjunctives without any mark to distinguish them from the indicative (*Ausführl. Sprl.* § 88, *Anm.* 3), but these could only be corrupt and mutilated forms. We believe that all the instances which he mentions belong to the analogy of $\beta\epsilon\acute{\iota}\omega\mu\epsilon\nu$, the production having fallen upon the first syllable. With regard to these epic forms in general, it is clear, that if $\theta\epsilon\acute{\iota}\omega$, $\theta\epsilon\acute{\iota}\eta\varsigma$, $\theta\epsilon\acute{\iota}\eta$, $\theta\epsilon\acute{\iota}\omega\mu\epsilon\nu$, $\acute{\alpha}\pi\omicron\theta\epsilon\acute{\iota}\omega\mu\alpha\iota$ are to be considered as belonging to the same form, the short connecting-vowel is due to the weight of the person-endings. It is equally clear, that they are all futures, and perhaps very ancient forms of the future: at least, forms answering to $\theta\epsilon\acute{\iota}\omega\mu\epsilon\nu$, $\acute{\iota}\omega\mu\epsilon\nu$ are used with a future signification in Homer; $\beta\epsilon\acute{\iota}\omega\mu\alpha\iota$, for instance, is a regular

future. Perhaps in the original form the increment did not extend to both root and connecting-vowel. There are other instances of this superfluous strengthening of the form: thus on the analogy of *κοιμοῦμαι* and *κοιμίσομαι* we should expect only *πλεφοῦμαι* or *πλεύσομαι* from *πλέω*; whereas we have also *πλευσοῦμαι*: *τιμάοιμι* would be a sufficient optative from *τιμάω*, but we have also *τιμῶην*.

390 The characteristic of the optative is *ι*, which forms a diphthong with the connecting-vowel: to this the long vowel *η* is occasionally subjoined. The person-endings are of the secondary form, with the exception of the first person, which is generally *-μι*, though it seems that the shorter form in *-ν* was here, as in the imperfect, occasionally substituted for it, in those cases where the first person of the optative regularly ended like the indicative: thus we have in Euripides: *ἄφρων ἀνέηεν εἰ τρέφουν τὰ τῶν πέλας* (*Etymol. Magnum*, s. v. *τρέφουν*). The optatives which add *η* to the characteristic *ι* always form the first person in *-ν*. The reason for the difference is obvious. In *τρέφοιμι*, which has no augment, there is no reason why the weight of the verb should drive off the full ending; but the longer form in *-ιην* of course would not admit of it. In the Æolic dialect, the characteristic *ι* was sometimes omitted, as already included in the *η*. Thus we have in a passage, probably from Sappho, quoted by Apollonius (*de Syntaxi*, iii. 22, p. 247 Bekker):

*αἶθ' ἐγώ, χρυσοστέφαν' Ἀφροδίτα,
τόνδε τὸν πάλον λαχόνην—*

where we adopt the emendation proposed by Bergk (*Rheinisch. Mus.* for 1835, p. 218), which is confirmed as well by the metre as by the remark in the *Etymologicum Magnum*, p. 558: *Λαχόνην ἔστι λάχοιμι, λάχοις, λάχοι*. We believe that this word represents the original formation of the optative; for *λαχόνην* = *λαχόγα-μι* = [ἐ]λαχό-σα-μι, would be the regular indeterminate corresponding to the subjunctive *λαχόω* = *λαχο-ίω* = *λαχόσω*. Bopp has suggested (*Annals of Oriental Literat.* p. 23) an explanation of this characteristic *ι* which at least deserves to be mentioned. He says: "The reason why the vowel *i* expresses the potential mood cannot be discovered in Greek, in Latin, nor perhaps in any other European language, but in Sanscrit, the radical element *i* expresses wishing, desiring; and what syllable could be more properly employed to indicate an optative, than the one to which the Hindu grammarians had given the primary signification of *Kānti*—*having desire*? I will not affirm that this is the primitive meaning of the root *î*, and that the grammarians had a sufficient reason for putting *Kānti* at the head of their explanations, but certain it is, that *îmas* has, among other significations, that of *we desire* or *wish*.

Now it is remarkable, that the sense expressed in Sanscrit, and the languages here compared with it, by a syllable, signifying desire, incorporated into the verb, is in English, and often in German also, expressed by detached auxiliary verbs, having the primary signification of wishing. Thus, in Notker we read, *I mahta baldur weinon*—vellem vehementer plorare. The German *mögen* has frequently this signification, and the English *may* is of the same origin, derived from the Saxon *magan*, in Gothic likewise *magan*." We have already said, that in our opinion the theory of agglutination, which Bopp has introduced, must be received with great caution and subject to many limitations. The inflexions of verbs may and do take place in the same way as the modification of nouns; namely, by pronominal insertion between the root and the person-ending in verbs, and between the root and case-ending in nouns. Of the pronominal elements which may be so inserted, there is no one more common than *-ia*, Sanscrit *ya*, corresponding to the second pronoun or the relative form. We know that the *s*, which characterizes the future and aorist, may degenerate into *i*, and we have had no difficulty in identifying this *s* with the second element. As then we shall see that the subjunctive and optative are virtually related as future and aorist, we must refer their characteristic *i* to a pronominal insertion of the same kind, and thus *τρέφοι-μι* for *τρέφέσα-μι* will be quite analogous to *fui* for *fuesa*.

391 Having now considered the forms of the subjunctive and optative separately, we must endeavour to determine the connexion between them. In the last chapter we mentioned that the desiderative *τυψέω* was related to the so-called optative aorist *τύψαια*, as present to imperfect, as definite tense to indefinite; and the augment of the latter is omitted like that of the iterative preterites. Now if we take the verbs in *-μι*, which present us with the oldest forms, we shall find a subjunctive *θιέω, θιέης*, &c. corresponding to an optative *θιέην, θιέης*, &c. The subjunctive has the primary form of the person-endings, the optative, the secondary form: in other respects they do not differ, for they both contain the verb-root affected by the insertion of *ι*: compare *θιέω, θιέης*, &c.; *θιέην, θιέης*, &c.; with *τίθημι (τι-θέ-ω), τίθης*, &c.; *ἐτίθην, ἐτίθης*, &c. In the existing state, the subjunctive is just as heavy a form as the optative; we must conclude, however, that, as the optative has the lighter endings, it must have been originally a heavier form than the subjunctive, and as this could result only from its having some prefix which the subjunctive wanted, it follows that it had the augment, or was related to the subjunctive as aorist to future. When the optative ceased to be used as a past tense in primary sentences, it would naturally lose its augment, or mark of past

time, retaining, however, its lighter person-endings as a trace of what it once was. The other differences between it and the subjunctive would spring up as time and use widened the gap which separated the parent tense from its offspring.

392 On the whole, then, we may say that future time was expressed by two varieties of the same pronominal insertion: in the one, the second element was inserted under the form σ -, *sa*; in the other, the same element appeared as ι -, *ya*. These two forms were occasionally united, as in the desiderative verbs in $-\sigma\epsilon\acute{\iota}\omega$ (Latin *-rio*); but in most cases only one of the equivalent insertions was employed; thus we have the latter only in the old subjunctives or futures $\beta\epsilon\lambda\omicron\upsilon\alpha\iota$, $\beta\epsilon\lambda\omicron\upsilon\mu\epsilon\nu$, $\theta\epsilon\lambda\omicron\upsilon\mu\epsilon\nu$, &c.; and the sigmatic form only appears in the more permanent futures indicative. Indeed it might be inferred from the analogy of the genitives in $-\sigma\iota\omega$ and $-\iota\omega$, that the so-called desiderative is the primitive and genuine form, of which the future in σ -, and the subjunctive in ι -, are successive degenerations. To all these three forms of the future there were corresponding forms of aorists or past tenses; to the first, the so-called Æolic optative aorist in $-\sigma\epsilon\iota\alpha$; to the second, the ordinary optative; to the third, the ordinary first aorist. The last alone preserved the augment, because in the indicative mood the idea of past time predominated in this form of the indefinite tense; in the other two the augment was omitted, because they are never used as direct expressions of past time, though they always bear the preterite meaning in subordinate sentences. We do not say that there ever existed a desiderative form of every tense of the indicative mood to which there is a corresponding tense in the optative; there might have been one, and there must have been one originally; but afterwards the tenses of the optative were formed by analogy, without the introduction of the intermediate form of the subjunctive. The only very remarkable variety in the formation of these optatives, desideratives, and futures, is, that the *i* is sometimes appended to the root-vowel, as in $\theta\epsilon\acute{\iota}\omicron\mu\epsilon\nu$, at other times to the connecting-vowel, as $\tau\acute{\upsilon}\pi\tau\omicron\upsilon\mu\iota$; and sometimes placed after the *s*, as in $\delta\rho\alpha\sigma\epsilon\acute{\iota}\omega$; at other times before the *s* or its substitute, as in $\theta\epsilon\acute{\iota}\eta\varsigma$, $\acute{\epsilon}\pi\alpha\upsilon\nu\acute{\omega}$ (Greg. Corinth. p. 229), and in some of the Sanscrit volitives (Wilkins, p. 365). These varieties are due to subsequent analogies, and not to any thing in the original principles of the language.

393 We shall now proceed to show, that the syntactical relation of the optative to the subjunctive is that which subsists between indefinite and definite tenses. It is well known to every student of Greek, that, in connected sentences, the Latin subjunctive present

corresponds to the Greek subjunctive, and the Latin subjunctive imperfect to the Greek optative; in other words, the Greeks used the subjunctive in sentences dependent upon a verb in the present or future tense, and the optative in those which were dependent on a verb in the past tense: for instance, γράφω, ἵνα μανθάνῃς corresponds to *scribo, ut discas*; but ἔγραψα, ἵνα μανθάνοις to *scripsi, ut disceres*. Therefore, the subjunctive is a definite tense, for it has relation to the present moment, and the optative is indefinite, for it must be determined by some particular time or circumstance referred to. The following considerations will show, that, as well in dependent as in connected sentences, the subjunctive corresponds to a future, and the optative to the aorist derived from it; in other words, the subjunctive is a determinate tense, and signifies "the *probable* occurrence of something *after* the time of speaking:" and the optative is an indeterminate tense, and signifies "the *probable* occurrence of something *after* the time specified" (above, § 372). And first, the subjunctive appears as an actual future in Homer. Thus we have in the *Iliad* i. 262:

οὐ γάρ πω τοίους ἴδον ἀνέρας, οὐδὲ ἴδωμαι.

Iliad vi. 459:

καὶ ποτέ τις εἴπῃσι, ἰδὼν κατὰ δάκρυ χέουσαν
 "Ἐκτορος, ἧδε, γυνή, κ. τ. λ."
 ὥς ποτέ τις ἐρέει,

where the future, which follows, clearly shows that the subjunctive before it is a future. *Iliad* vii. 197:

οὐ γάρ τις με βίῃ γε ἐκὼν ἀέκοντα δίηται.

Odys. vi. 201:

οὐκ ἔσθ' οὗτος ἀνὴρ διερὸς βροτός, οὐδὲ γένηται,
 ὅς κεν Φαιήκων ἀνδρῶν ἐς γαῖαν ἵκηται,

on which see Wytttenbach (*Eclog. Histor.* p. 343), quoted by Gaisford (in his notes on Herodotus, Vol. i. p. 5). *Odys.* xvi. 437:

οὐκ ἔσθ' οὗτος ἀνὴρ, οὐδ' ἔσσεται, οὐδὲ γένηται,
 ὅς κεν Τηλεμάχῳ σῶ νιῒ χεῖρας ἐποίσει.

It will be observed that we have ὅς κεν with the future in this passage, but ὅς κεν with the subjunctive in that which precedes.

394 Instead of this direct future with οὐ, the Attics employed μή with the aorist subjunctive; thus we have in Plato, *Respubl.* vi. p. 492 E: οὔτε γὰρ γίγνεται, οὔτε γέγονεν, οὐδὲ οὖν μὴ γένηται, κ. τ. λ. (cf. *Phædr.* p. 350 G), where οὐδὲ μὴ γένηται is perfectly synonymous with the οὐδὲ γένηται of the two passages from the *Odyssee*. The

combination of the negatives οὐ μή is found not only before the aorist subjunctive with a negative future sense, but also before the future indicative, generally in a prohibitive sense. In the latter case, Elmsley and others would take the sentence interrogatively, according to the method adopted with regard to the positive use of οὐκοῦν. Thus, e. g. Eurip. *Bacchæ*, 340:

οὐ μὴ προσοίσεις χεῖρα, βακχεύσεις δ' ἰών,
μηδ' ἐξομόρξει μωρίαν τὴν σὴν ἐμοί;

should mean, according to these critics, "will you not keep off your hand (will you not—not put your hand near me), and go and play the Bacchanal, and not wipe off your folly on me?" But οὐ μὴ with the subjunctive is explained as an ellipse—οὐ μὴ γένηται being equivalent to οὐ δέος ἐστὶ μὴ γένηται, "there is no fear lest it should happen." Neither the one nor the other of these explanations is perfectly accurate. With regard to οὐ μὴ with the future, it is not true that this combination always implies a prohibition. There are passages in which it is perfectly equivalent in meaning to οὐ μὴ with the subjunctive; as in Sophocles, *Æd. Col.* 176:

οὔτοι μὴ ποτέ σ' ἐκ τῶνδ' ἐδράνων,
ὦ γέρον, ἄκοντά τις ἄξει.

Electra, 1052:

ἀλλ' εἴσιδ' · οὐ σοι μὴ μεθέψομαι ποτε,
οὐδ' ἦν σφόδρ' ἰμείρουσα τυγχάνης.

Euripides, *Phœniss.* 1606:

σαφῶς γὰρ εἶπε Τειρεσίας, οὐ μὴ ποτε,
σοῦ τήνδε γῆν οἰκοῦντος, εὖ πράξειν πόλιν.

Aristoph. *Ran.* 508:

μὰ τὸν Ἀπόλλω, οὐ μὴ σ' ἐγὼ
περιόψομαι ἀπελθόντα.

It is obvious that an assertion, not a prohibition, is implied in these passages. The proper explanation of those from Sophocles and Aristophanes has been suggested by Hermann (on Elmsley's *Medea*, v. 1120). He says that the general meaning of οὐ μὴ with the future is due entirely to the circumstance, that in the cases where a prohibition is implied, the verb is always in the second person;—and "will you not not touch," &c., is equivalent to "don't touch." But in the cases which he is discussing, the verb is in the first or third person; and the infinitive, in the passage which we have quoted from Euripides, implies a third person. Now when we say, as in the passage from the *Ædipus Coloneus*, "will not a person not drag you from this seat against your

will?" this is equivalent to "will he not suffer you to remain?" which implies "of course he will;" and so in the other passages. With regard to οὐ μή with the subjunctive, Hermann thinks, that, although an ellipse such as we have mentioned is possible—for we have the full form in Herodotus, e. g. in i. 84: οὐ γὰρ ἦν δευδὼν μὴ ἄλῳ ποτε—yet this ellipse would be somewhat harsh and unnatural, and it would be much better to follow the analogy of the future, and suppose that οὐ μή with the subjunctive is also interrogative: thus Æschylus, *Sept. c. Thebas*, 38:

καὶ τῶνδ' ἀκούσας οὐ τι μὴ ληφθῶ δόλῳ;

would mean, "Having heard of these things, shall I not not-be-caught by stratagem?" i. e. "shall I not be safe from it?" which implies, "of course I shall." We think this view a sound one; the following illustrations will perhaps convince our readers that it is so. There can be no doubt that οὐ, with the future or subjunctive taken interrogatively, is equivalent to an injunction or exhortation. The future is generally in the second person: thus, οὐ μινεῖς; means "stop!" the subjunctive in the first, as οὐκ ἔω; "shall I not go?" We have a good analogy for this in the use of *quin* by the best Latin writers. This particle, which is equivalent to *cur non*, is constantly used with the indicative present, taken interrogatively, but always implying an exhortation; thus we have, Plautus, *Menæchm.* ii. 1, 22: *Quin nos hinc domum redimus?* Terence, *Andr.* iv. 4, 15: *Quin dicis unde est clare?* Livy, i. 57: *Quin, si vigor juventæ inest, conscendimus equos?* where see Drakenborch's note: so that Bentley is quite right in reading *quin redimus?* instead of *quin redeamus?* in Ter. *Eunuch.* iv. 7, 41. It is also clear that μή, with the subjunctive or future, is the expression of a direct prohibition. We need not give any instance to show that μή τύψης differs from μή τύπτει only in being particular instead of general. The imperative use of μή with the future has been denied by Elmsley, who would substitute the subjunctive for the future in Euripides, *Med.* 804: λέξεις δὲ μηδὲν τῶν ἐμοὶ δεδογμένων, and would either emend or explain away a number of other passages which he quotes in his note upon that line, but which are, we think, sufficient to justify the construction. Matthiæ (*Gr. Gr.* § 511, 3) quotes two or three others, and we may add Soph. *Aj.* 572: καὶ τὰ μὲν τέχνη μήτ' ἀγωνάσθαι τινὲς θήσουσ' Ἀχαιοῖς, μήθ' ὁ λυμεῶν ἐμοί (above, p. 519). As, therefore, οὐ with both future and subjunctive, taken interrogatively, may convey a positive injunction, and μή with either of the same inflexions, taken imperatively, may convey a negative command, it would not be unnatural that, when command with regard to one act and prohibition with regard to another were to be expressed at once, the first would be effected by οὐ with the future or subjunctive, taken interrogatively,

the second by *μή* with the future or subjunctive, without any interrogation. We have an instance of this in *Æschyl. Sept. c. Theb.* 232:

οὐ σίγα; μηδὲν τῶνδ' ἔρεῖς κατὰ πτόλιν.

In most cases, however, the two sentences, which generally seem to have referred to a command of something and the prohibition of its opposite, would be joined together by some copulative conjunction, and thus the whole would be included in the interrogation, as in the passage from the *Bacchæ* quoted above; in *Soph. Aj.* 75:

οὐ σίγ' ἀνέξει μηδὲ δειλίαν ἀρεῖς;

and in *Eurip. Hippolyt.* 498:

ὦ δεινὰ λέξας, οὐχὶ συγκλείσεις στόμα,
καὶ μὴ μεθήσεις αὐθις αἰσχίστους λόγους;

From this custom of joining together an injunction of some thing and a prohibition of its contrary, would arise the custom of employing a combination of the two negatives to express in the strongest terms an union of the two imperatives; and this combination would always be used, by implication, interrogatively, and with two shades of meaning. As the future or the longer form was more used in connexion with the direct negative *οὐ* and in the second person, this tense would be more generally employed by the Attics to express a prohibition in the second person by means of *οὐ μή* taken interrogatively: and as the subjunctive, a shorter form of the future, was more frequently subjoined to the indirect or subjective negation *μή*, to express a direct prohibition, it would be more usually employed, in connexion with *οὐ μή* and in an interrogative sense, to express the direct negation of something future, in the sense in which *οὐ* was used with the subjunctive by Homer. That in the collocation *οὐ μή*, whether with the future or with the subjunctive, the notion of the verb is negated and reversed by *μή*, and the question expressed by *οὐ*, is clear from the nature of the case. For as *οὐ μενεῖς* is equivalent to *μένε*, and *οὐκ ἔω* to *μένω*; so *οὐ μὴ μενεῖς* is equivalent to *οὐκ εἰ* and *οὐ μὴ μέλω* to *οὐκ ἔω*; This is also shown by the fact, that, if by any chance the combination *οὐ μή* is separated from the verb, the *μή* is repeated immediately before the verb to which it belongs; thus we find in *Soph. Œd. Tyr.* 328:

ἐγὼ δ' οὐ μὴ ποτε,
τάμ' ὥς ἂν εἴπω, μὴ τὰ σ' ἐκφρήνω κακά.

In this syntactical peculiarity of the Greek language we see clear enough traces of the original identity of the future and subjunctive, in an actual and strongly marked divergency of use,

395 The employment of the subjunctive in dependent or connected sentences, and its contrast here to the optative, on the one hand, and to the past tenses of the indicative on the other, will also show very directly its affinity to the future (see *Gr. Gr.* Art. 502, &c. 607 (c), 614). It almost invariably follows *ἐάν* or any relative word succeeded by *ἄν* in the protasis, in which case it is equivalent to a conditional future, and is generally followed in the apodosis by the future indicative, as *ἐάν τι ἔχῃς, δώσεις*. There is scarcely one undoubted instance in Attic Greek of the use of *ἄν* with the future indicative. In those which are cited by the grammarians, the most eminent critics have either omitted the *ἄν*, or changed the future into the optative. In Aristoph. *Nub.* 466, where the critics and the MSS. are equally divided between *ἄρ'* and *ἄν*—*ῥψομαι*, we ought to prefer the former particle, as in Eurip. *Bacch.* 639: *τί ποτ' ἄρ' ἐκ τούτων ἔρεϊ*; and in Æschin. *c. Ctes.* 543, the true reading is *ἀνερεϊ*. In Xenophon, *Cyrop.* vii. 5, § 21, we have *ὅταν δὲ αἰσθῶνται ἡμᾶς ἔνδον ὄντας, πολὺ ἄν ἔτι μᾶλλον ἢ νῦν ἀχρεῖοι ἔσονται*. Dindorf omits the *ἄν*, though there is no variation in the MSS. A very similar passage is found in Dinarchus (*in Demosth.* § 111): *πολὺ γὰρ ἄν δικαιοτέρον ἐλεήσετε τὴν χώραν*, where Bekker conjectures *ἐλεήσαιτε*, though Hermann does not think that the emendation is necessary (*Opusc.* iv. p. 33). For similar corruptions and their obvious remedy, see the latest editors on the following passages: Thucyd. i. 150; Plat. *Phædo*, p. 61 c; *Crito*, p. 53 c; *Resp.* p. 615 d; Eurip. *Andr.* 464; Xen. *Cyr.* iv. 5, § 49. It is nearly certain that *ἄν* cannot be used with the future infinitive. In Thucydides, at all events, this solecism is easily removed from the few passages in which it deforms the text (see the Preface to our recension, p. xi). It is worthy of remark that the construction with *οὐ μή* and the subjunctive is considered quite equivalent to the future in the apodosis: thus we have in Thucyd. iv. 95: *ἢν νικήσωμεν, οὐ μήποτε ἐσβάλωσιν*, and in Sophocles, *Electr.* 43: *οὐ γὰρ σε μὴ γήρᾳ τε καὶ χρόνῳ μακροῖ γινῶσ' οὐδ' ὑποπτεύουσιν*. The subjunctive also follows *εἰ* or a relative word without *ἄν*, but then there is a difference of meaning: thus, *ἐάν τι ἔχῃς, δώσεις* means "if you shall happen to have any thing (which will probably be the case) you will give it;" but *εἰ τι ἔχῃς* would not have implied any probability,—“if you shall happen to have any thing (which is a mere contingency)” (see *Philol. Mus.* i. pp. 96 foll.). If, however, we compare either of these cases with the optative similarly used, we shall easily perceive, that, while the subjunctive in the hypothesis implies only one relation—that is, a relation to the time of speaking—and therefore stands on the same footing with the definite tenses, the optative presumes a relation to some time or circumstance which it is neces-

sary to define. Thus, *εἴ τι ἔχοιμι, διδοίην ἄν* means "if I had any thing under certain circumstances (i. e. as often as I had it), I would give it," where the verbs are clearly in the indefinite tense, or express a double relation—of past time in regard to the time of speaking, and of posteriority in reference to the time or circumstance spoken of. Perhaps the most direct proof of this is the usage of the subjunctive or future, as contrasted with that of the optative in the apodosis. Both the future and subjunctive were constantly used with *κεν*=*ἄν* in the apodosis of conditions in the older state of the language, and we have just shown that even in the Attic writers there may have been some traces of this usage of *ἄν* with the future. But then the protasis is always expressed, for the subjunctive and future being definite tenses, and implying only a relation to the time of speaking, would not require *ἄν* when used independently, because *ἄν* refers at once to some other circumstance, which other circumstance, namely, the time of speaking, is presumed in the future and subjunctive: when the condition was expressed, the *ἄν* might accompany the apodosis, though even then it would be unnecessary, and would consequently be omitted when the syntax of the language gained its full development. We find the same correspondence between the future and subjunctive in certain forms of the temporal sentence (*Gr. Gr. Arts.* 580, 582, 583, (β)).

396 The relation between the subjunctive and optative is farther shown by their occasional appearance in the same final sentence, to express a succession of consequences. This usage has been very well explained by Dr. Arnold (*Thucyd.* iii. 22, p. 446). The following are instances; Herod. ix. 51; *ἐς τοῦτον δὴ τὸν χρόνον ἐβουλεύσαντο μεταναστῆναι, ἵνα καὶ ὕδατι ἔχωσι χρῆσθαι ἀφθόγῳ, καὶ οἱ ἱππεὲς σφέας μὴ σινοίατο.* Thucyd. vii. 17: *ναῦς ἐπλήρουν, ὅπως ναυμαχίας τε ἀποπειράσωσι, καὶ ἥσσον οἱ Ἀθηναῖοι κωλύειν ἀπαρχειν.* Eurip. *Hecuba*, 1120:

ἔδεις, μὴ σοι πολέμιος λειφθεῖς ὁ παῖς
 Τροίαν ἀθροίσῃ καὶ ξυνοικίσῃ πάλιν
 γνόντες δ' Ἀχαιοὶ ζῶντα Πριαμίδων τινα
 Φρυγῶν ἐς αἶαν αὖτις αἵρουειν στόλον,
 κ' ἄπειτα Θρήκης πεδία τρίβοιεν τάδε
 λεηλατοῦντες· γέλοσιν δ' εἴη κακὸν
 Τρώων, ἐν ᾧπερ νῦν, ἄναξ, ἐκάμνομεν.

"It seems to me," says Dr. Arnold, "that in all these cases the transition from the subjunctive to the optative mood is meant to show that the several consequences are not contemporaneous, but that the subjunctive mood indicates the *immediate*, and the optative the

remote consequence of the action contained in the principal verb, the second being a consequence upon the first: and that to mark this gradation, different moods are employed, and the subjunctive is thus used even when the principal verb is in the past tense, because otherwise the distinction intended could not be marked."

397 With regard to the separate use of the optative without ἄν, that is, as a proper optative expressive of a wish, it need only be remarked, that the entire dependence of the verb expressive of the wish upon some circumstance or event is obvious, not only from the fact that the past tense of the auxiliary is used in modern languages, but also from the employment of the limiting particle θε, "in this particular," in connexion with εἰ and the optative, and from the use of the past tense ὥφελε for the same purpose. It is remarkable that the optative proper is accompanied not only by the conditional particle, but also by πῶς ἄν, as the apodosis of a condition implied. This shows how little reason there is to suppose with Bopp that the optative intrinsically and primarily expresses a wish. It only does so as an indefinite and dependent tense, having reference to some other time or circumstance than the present. In our own language, "if I only could manage to bring it about!" and "how could I manage to bring it about?" are expressions of the same wish. Inattention to this latter usage has prevented all the commentators* from seeing the force of a very natural passage in Æschylus (*Agamemn.* 1198). Cassandra says wildly to the Chorus: ἐκμαρτύρησον προὔμους τό μ' εἰδέναι λόγῳ-παλαιὰς τῶνδ' ἁμαρτίας δόμων—"give me a direct testimony confirmed by oath that I am acquainted with the old traditional sins of this family" (see above, § 311); to which the Coryphæus replies:

καὶ πῶς ἂν ὄρκος, πῆγμα γενναίως παγέν,
παίωνιον γένοιτο;

"and would to God that an oath, strong as I could make it, might serve as a remedy for them!" The words which follow show that we have here rather an admission than a question on the part of the Chorus; and the emphasis, implied in the cumulative πῆγμα γενναίως

* Hermann, in his posthumous edition of Æschylus, adopts our interpretation of the passage. His note is: "inepte addidisset Æschylus γενναίως παγέν, si quæreret chorus, quid prodesse jusjurandum posset. Hoc potius dicit, atque utinam jusjurandum, firmamentum generose firmatum, medellam afferre possit! quo indicat, quamvis sanctissimum jusjurandum tamen nihil profuturum esse." We have written farther in support of our view in the *Journal of Philology*, III. pp. 210—215.

παγέν, suggests the objection that no assent to prophecy, however earnest, will serve as a cure for the evils predicted. This is in fact the foundation of the idiom in question: for when we say, "how could it be brought about?" we are seeking for some consummation devoutly to be wished.

398 This connexion of the subjunctive and optative appears also from an examination of other languages, as well those which form their moods and tenses by inflexion, as those which use auxiliaries.

We cannot have a better proof of the correspondences in meaning between the future and aorist on the one hand, and the subjunctive and optative on the other, than that which is furnished by the tense-system of the Latin verb. It is true that we are obliged to call in a sort of philological algebra, before we can restore the existing forms to their proper shape and their legitimate functions. But this procedure is one which justifies itself, and leaves no ambiguity as to the correctness of the results. To begin with the substantive verb *sum* = *esum*, we cannot doubt that the future *ero*, *eris*, *erit*, &c., is another form of the subjunctive *sim*, *sis*, *sit*, &c. The one has lost its characteristic *i*, which the other has retained at the expense of its initial vowel; but even in its monosyllabic form it is not complete, for we find the fuller word *siem* in the older writers, so that the complete future or subjunctive must have been *esiem* = *ero*. In order to apply this result to the ordinary verb, we must set aside the futures in *-bo*, *-bis*, *-bit*, &c., which are generally found in the first two conjugations, and here and there (as *ibit* and *quibit*) in the fourth. In the third or consonantal conjugation, the future generally ends in *-am*, *-es*, *-et*, &c. The first person in *-am* belongs to the present subjunctive of the last three conjugations, which exhibit *-am*, *-as*, *-at*, &c.; the other persons in *-es*, *-et*, &c. are found throughout in the present subjunctive of the first conjugation, which gives us *-em*, *-es*, *-et*, &c. To begin with *regam*, we might assume an original *reg-iam* on the analogy of *navalis* for *navialis*, *funalis* for *funialis*, &c.: and we have many old forms to convince us that the Latin subjunctive ended in *im*; such are *temper-im*, *ed-im*, *du-im*, &c. Consequently, *reg-am* was originally *reg-iam* or *reg-im*, and this harmonizes with the form *fui[m]* for *fuesa*: so that the corresponding aorist ought to be *e-reg-i*. According to this principle *amem* is equivalent to *ama-im*; and *reg-em* (which must be assumed from *reg-es*, *reg-et*, &c.), presumes an original *reg-a-im* = *reg-ia-im* = *reg-sim*, of which we have a further extension in *reg-sero* = *reg-se-sim* = *reg-se-siem*; and a third in *reg-sis-sem* = *reg-se-se-siem* (above, § 378). Now *regem* = *reg-si-m* is really nothing more than the determinate tense corresponding to *[e]reg-si* the aorist; and as one

performs its functions in the subjunctive, the other in the indicative mood, we can plainly see that the differences of mood, as they are called, are set at nought by this pair of tenses, and we may infer that there is, after all, rather a conventional than a real distinction between the modal and temporal forms. The dissimilitude of the future indicative in *-bo* and the present subjunctive of the verbs which admit this formation, is due to the subsequent introduction of this composite tense. It is easy to understand why the first person of the subjunctive has been called in by the other future: at any rate no Englishman need wonder that a broader form should be used for the first than for the other persons of the future, for we are in the constant habit of saying "I shall," when we say "you will," and *vice versa*.

399 The Sanscrit language seems to have lost the future corresponding to the aorist. We find an aorist or perfect in *-sha-m* analogous to the Greek in *-σα*: thus, from *pach-* (πέπτω, *coquere*) we have the aorist *apâksham*, and from *sṛṣ-* (ἔρπειν, *serpere*) we have the aorist *asarpṣam*. We should of course expect to find a corresponding future in *-shâ-mi*, and such a form occurs in the *Vêdas* (see Rosen, *Rig-Vêda Sanhita*, p. iv); but the Sanscrit future always inserts an *i*, which, according to the laws of euphony, becomes *y*; and the future of *pach-* is not *pakshâmi*, corresponding to *apâksham*, but *pakshyâmi*, which rather corresponds to the Greek desiderative in *-σεῖω*. Now it is remarkable that the Sanscrit has an aorist corresponding to this future, in which the radical vowel is not increased as in the other aorist; and this aorist, like the similar Greek aorist in *-σεια*, is very seldom used singly (Wilkins, *Sanscrit Grammar*, p. 297), but occurs chiefly as an optative in conditional sentences (*Gr. Gr. Art.* 502, III.); as *jñānaṁ chēd a-bhavishyat, sukham a-bhavishyat*, "if there were knowledge, there would be happiness" (Wilkins, *Sanscrit Grammar*, p. 655), i.e. εἰ ἐπιστήμῃ εἴη, καὶ εὐδαιμονία ἂν εἴη. Or sometimes for the sake of greater emphasis, the demonstrative *tadâ* will be prefixed to the apodosis in correlation to the conditional relative *yadi*: as in the following instance, where the hypothesis is assumed to be false, and where both clauses would have the imperfect indicative in Greek, and the imperfect subjunctive in Latin (*Gr. Gr. Art.* 502, IV. (a)): *yadi çilâ kômalâ a-bhavishyat, tadâ çṛigâlair êva a-bhakshishyata*, "if a stone were soft, which it is not, in that case it would certainly be eaten up by the jackals." When, however, the time of speaking only is referred to (*Gr. Gr. Art.* 502, II.), the unaugmented form, which is used as the regular future, is invariably employed. Thus, Krishna says (*Bhagavad-Gîta*, XVIII. çloka 68):

*ya idañ paramañ guhyañ madbhaktêshvabhidhâshyati,
bhaktiñ mayi parâñ krītvā, māmēvaishyatyasañçayah.*

i. e. *ya idam paramam guhyam mat bhaktêshu abhi-dhâshyati,
bhaktim mayi parâm krītvā, mām ēva êshyati a-sañçayas.*

—“he who shall explain this most excellent mystery to my worshippers, having performed the highest act of worship to me, shall approach me without hesitation.” *Abhi-dhâ-shyati* (a compound of the root *dhâ-*, “to place,” Greek *θε-*, with the preposition *abhi*, Greek *ἐπι*, and therefore signifying “to place near,” “to lay before,” “to explain”), is the regular future, and is so used independently of any protasis in the *Nalas*, XII. 76: *vistâreña abhi-dâshyâmi*, “I will tell you at full length;” *ê-shyati* (= *aishyati*) is a similar future of the root *i-*; the 2nd person occurs in the apodosis to a participle in *Bhag. Gît.* VIII. 7. The only difference, in fact, between this and the Greek optative is in the use of the augment, which therefore marks the tense of this optative very strongly. The potential or subjunctive, on the other hand, has no augment, and is merely formed from the present (next to which it is placed by the Sanscrit grammarians) by the insertion of this desiderative *i*. It is either an optative, as in the *Nalas*, XIII. 28, 29: *yadi paçyema tām pâpân, avaçyam ēva hanyâma*, “could we see that wicked woman we would assuredly kill her;” or a subjunctive, as in *Nal.* XVII. 45: *tad vachas mama âvêdjan, yathâ no jâniyâd*, “that discourse must be made known to me, lest he discover, &c.” (*ne cognoscat*). We see, then, that in the Sanscrit forms no less than in the Greek, the so-called modal distinctions resolve themselves into mere differences of tense.

400 In our own and other languages, in which the moods and tenses are formed by auxiliaries, we find the relation between the future and subjunctive, and the subjunctive and optative, expressed as a relation between present and past time. Thus, future “I will;” subjunctive “I would;” future “I shall;” subjunctive “I should;” subjunctive “I may;” optative “I might;” &c. German future *ich werde*, subjunctive *ich würde*; future *ich soll*, subjunctive *ich sollte*; subjunctive *ich möge*, optative *ich möchte*; &c.

401 (2) IMPERATIVE AND INFINITIVE.

It may be doubted if the imperative is really entitled to the rank of a distinct mood. The marks which characterize it cannot be considered as modal inflexions, as they affect only the personal termination, which is generally omitted in the second and strengthened in the other persons. It appears natural, that, in issuing a command, a

specification of the person immediately addressed should be omitted, and a great emphasis laid on the person to whom the command is meant to apply. This is effected in English and German, by placing the pronoun after the verb, as "give ye," *geben sie*, &c.: or, in the second person singular, by omitting the pronoun altogether, as "give me the book," *sieh da!* A command is expressed in the ancient languages in a precisely analogous manner: in the second person singular, the personal inflexion is frequently omitted, or when expressed, a stronger form is used, as is always the case in the other persons.

402 The person-endings of the Greek imperative are, in the active voice, as follows:

Second person singular: omitted as in *τύπτε*; -ς, as in *θῑέ-ς*, *δό-ς*, &c.; -θι, as in *ἵστα-θι*; for this the Laconians used the indicative form -σι, just as *θεός* in the same dialect is written *σίος*: thus we have *ἄττασι* for *ἀνάστηθι*; *κάββασι* for *κατάβηθι*: see Valckn. *ad Adon.* p. 104: and the -θι is changed into -τι when a θ- precedes, as in *τίθε-τι*; for the same reason the -ς is turned into -ν when a σ- precedes, as in *τύπο-ν* for *τύπα-ς*, or *τύπ-σα-θι*.

Third person singular: -τω, the idea of instrumentality being expressed by the ablative case (§ 351).

Second and third dual and second plural are the same as those in the indicative, the third dual having, however, ω instead of the η, which appears in the secondary forms of that person in the indicative.

The third person plural is either -ντω (later -ντω-ν) or -τωσαν: the former appears to be the more genuine; it is the same as the indicative with a lengthening of the vowel, corresponding to that which appears in the third singular. Whether the final -ν is merely adscititious, or intended to mark more strongly the genitive plural or ablative case, is uncertain. With regard to the form in -τωσαν, it seems to have arisen from a mistaken analogy derived from the secondary tenses in the indicative: the ear led to the impression that *τυπτεύω-σαν* was a plural formed from the singular, like *ἐτετύφει-σαν* from *ἐτετύφει*, and they did not perceive the compensation-principle in the latter case.

403 The passive-endings are, in the singular, second person -σο, contracted as in the secondary forms of the indicative; third person -σθω: in the dual, second person -σθον; third person *σθων*: in the plural, second person -σθον; third person -σθων or -σθωσαν. In the first aorist middle the ending of the second person singular is not -ω, as it should be if contracted from -α-σο, but -αι. The neuter aorists in -ην form their imperative like the ordinary verbs in -μι in the active voice; of course we have *τύφθητι* not *τύφθηθι*, for the reason mentioned before.

404 The Sanscrit imperative differs from the Greek in having a first person in all three numbers and in both voices. This is also the case in English, though only in poetry and in the plural, as "Leave we the theme,"—"Charge we the foe." The characteristic of the first person imperative active in Sanscrit is *-ni* instead of *-mi*. In the case of verbs in *-âmi*, the first person imperative differs from the first person present indicative only in the substitution of *-ni* for *mi*: in the case of verbs in *-êmi*, *-ômi*, and *-aumi*, it is formed like the imperfect indicative, by resolution into *-ayâni* and *-avâni*. In the middle this is contracted into *âi*, by an elision similar to that which transforms the first person indicative *âtmanêpadam* from *-mê* into *-ê*. The second person of the imperative active is expressed either by the person-ending *-dhi*=Greek *-θι*, occasionally abbreviated into *-hi*, as *brû-hi*, "say;" or by the mere crude-form of the verb, as *tanu*, like *δείκνυ* in Greek. The other persons in the active are expressed much in the same way as in the indicative; the third persons singular and plural are *-tu*, *-ntu*, instead of *-ti*, *-nti*, so that they correspond to the Greek *-τω*, *-ντω*. The second person singular *âtmanêpadam* is *-sva*; the other endings *-tâm*, *-mahai*, *-thâm*, *-tâm*, *-mahai*, *-dhvâm*, *-ntâm*, present the locative case of the personal pronouns under a very strong form.

405 The Greek infinitive has the following endings in the active voice. In the more recent authors the infinitive of the verb in *-μι*, ends in *-ναι*, preceded by a short vowel in the present tense, as *τε-θέ-ναι*, *ἰ-στά-ναι*, *δι-δό-ναι*; but by a long vowel or diphthong in the second aorist, as *θεῖ-ναι*, *σπῆ-ναι*, *δοῦ-ναι*. The accent seems to show that the infinitive in *-έ-ναι*, &c. must imply the compound termination *-ι-νος*=*-σινος* (§ 258), so that the infinitive *τετυφ-έναι* represents the locative of a word analogous to *δικαιο-σύνη*. The verbs in *-ω* form the infinitive of the present, future, and second aorist in *-ει-ν* or *-εῖ-ν*, of the first aorist in *-σαι*, of the perfect in *-έ-ναι*. The passive infinitive of all verbs ended in *-σθαι*, that of the neuter aorists in *-ῆ-ναι*. All infinitives in *-ει-ν* or *-ναι* have *-μεναι* or *-μεν* as their representatives in the more ancient authors. For *-ειν* the Æolians and Dorians wrote *-ην*, the Dorians also *-εν*. The Dorians and Æolians also substituted *-ην* for the infinitive ending *-ναι*; and for the contracted verbs in *-άω*, *-όω*, there was an Æolic infinitive in *-ς*, as *γέλαῖς*, *ὑψοῖς*, for *γελᾶν*, *ὑψοῦν* (Buttmann, *Ausführl. Sprl.* § 105, *Anm.* 21).

406 The Latin language has two active infinitives: the one terminates in *-re* or *-se* (*dic-e-re*, *dic-si-s-se*, *es-se*); the other in *-tum* (*dictu-m*), which, in the modern grammars, is absurdly enough called the supine in *-um*. In the passive, *-er* is subjoined to the former

infinitive, thus from *videre* we have *viderier*=*videsyer*; this full form, however, is generally contracted by the omission either of the characteristic *r=s* of the active, as in *dici-er*; of the last syllable *-er*, as in *videri*; or of both at once, as in *dici*; the latter infinitive is written *-tu* (*dic-tu*): modern grammars call it the supine in *-u*.

407 The Sanscrit infinitive is perfectly analogous to the Latin infinitive in *-tum*. Thus the root *gru* (Greek *κλυ-*), "to hear," makes *grutas*, "heard," and *grôtum*, "to hear." These infinitives in *-tum* are cases of verbal nouns: another case is the Sanscrit gerund in *-tvâ*; thus from *hâ-tum*, "to leave," or "the leaving," we have *hi-tvâ*, "by or in the leaving" = *τῷ λέπειν*.

408 Those acquainted with Greek syntax are aware that the infinitive is sometimes used to express a command: it must be remarked too by every one, that there is a great resemblance between the third person singular imperative passive and the termination of the passive infinitive. A modern philologist (Gräfe, *das Sanskrit Verbum*, p. 58) has gone so far as to propose, that the first person singular imperative in Sanscrit, as *tisht'h'âni*, and the second person singular first aorist imperative in Greek, as *τύψον*, should be considered as forms of the infinitive in *-ναι*: nay more, that the first person plural, as *tish-t'h'âma*, is the same as the infinitive *ἵστάμεν* for *ἵστέναι*. It would be difficult to convince us that these resemblances are more than accidental, though, as we have shown above, the Latin language presents some analogies which favour the supposition (above, § 362).

409 With regard to the similarity between *τυπέσθω*, &c. and *τύπτεσθαι*, &c. we must explain ourselves at greater length. It is remarkable, that, where *τ* appears in the active person-endings, *-σθ* appears in the passive: thus we have *τύπτε-τ-ον*, *τύπτε-σθον*; *τύπτε-τε*, *τύπτε-σθ-ε*; *τυπέ-τ-ω*, *τυπέ-σθ-ω*; &c. At first sight one might be disposed to think that this *σθ*- is merely an arbitrary insertion to mark the passive voice. But this view is overthrown by the appearance of the same combination *-σθ*- in the infinitives, where there is no corresponding *τ* in the active voice. Besides, in some instances, we have seen that the *-σθ* admits of an easy explanation; in fact, merely the imperative third person singular and the infinitives remain unexplained. We must, therefore, seek for some solution in these two cases, and, if a probable and consistent theory suggests itself, we must take it on its own merits, even though it may not harmonize with the account which we have given of the same combination of letters in the dual and plural person-endings.

On examining the passive imperative-endings we find, that, though the second person has generally the same ending as the corresponding person in secondary form of the ordinary suffixes (τύπτου for τύπτεσθαι, compare ἐτύπτου; τέτυψο = τέτυπ-σο, compare ἐτέτυψο), the third person always end in -θω or -σθω (as τυπτέ-σθω, τετύφ-θω), though the corresponding secondary form is -το; nay more, that the aspirate is even extended to the preceding consonant, though this is not aspirated in the corresponding tense of the indicative; thus ἐτέτυπτο, imperative τετύφθω. We must, therefore, conclude that there is something essential and necessary in this aspiration. Now we observe, not only that the present imperative τυπτέσθω is like the present infinitive τύπτεσθαι in this respect, but also that there is the same resemblance between the perfect imperative τετύφθω and the perfect infinitive τέτυφθαι. There is only one way of explaining these resemblances, namely, by supposing that they arose from the use of the infinitive to express a command, and by a subsequent effort of euphony which accommodated the final sound to the person-endings of the active imperative. Besides, the Sanscrit *tuda-tām* shows us that if the analogy of the affixes was carried out, the third person of the passive imperative must have been τυπτέ-την, and this was driven out by its resemblance to the corrupted dual. On the whole, we cannot fail to recognise in the forms of the imperative, both active and passive, the influence of a later and abnormal analogy operating on the basis of a conventional idiom which employed the infinitive as the vehicle of commands and entreaties. We do not, however, believe that there is any connexion between the infinitive active τύψαι and the corresponding imperative middle, which must be a corruption of τύψα-σαι.

410 An examination of the active infinitive endings will show us that there are in fact three, and only three, distinct forms:

- (1) -μεναι, contracted to -μεν or -μειν;
- (2) -ναι, contracted to -εν or -ειν or -ην;
- (3) -ς or -ις.

Although the same verb in different ages of the language appears with infinitives in -μεναι and -ειν, we think it erroneous to say that the form in -ειν is a contraction of that in -μεναι. These three terminations are, we conceive, participial endings, and therefore it is just as possible for a verb to have two of these infinitive endings, as it is for the same verb to exhibit two different forms of the participle.

We will first produce other instances of these endings with an adjectival or participial signification.

(1) -μεναι. This form seems at first sight to be an inflexion of the regular passive participle in -μενος; but we must recollect that

the termination $-\mu\acute{\eta}\nu=-\acute{\mu}\acute{\epsilon}\nu-s$ expresses an active agent, as we may see in such words as $\pi\rho\omicron\beta\alpha\tau\omicron-\gamma\nu\acute{\omega}\mu\omega\nu^*$, $\pi\omicron\lambda\nu-\pi\rho\acute{\alpha}\gamma-\mu\omega\nu=\pi\omicron\lambda\nu-\pi\rho\acute{\alpha}\gamma-\mu\{\frac{\epsilon}{\omicron}\} \nu-s$, $\pi\omicron\iota-\mu\acute{\eta}\nu=\pi\omicron\iota-\acute{\mu}\acute{\epsilon}\nu-s$, &c. (above, § 256); and that an active sense is generally conveyed by the combination $-\mu\epsilon-\nu$, when it is followed by the second element; cf. $\chi\alpha\rho-\mu\omicron\nu\acute{\eta}$, $\acute{\alpha}\rho-\mu\omicron\nu\acute{\iota}\alpha$, &c. It would be most reasonable therefore to assume that the infinitive in $-\mu\epsilon\nu\alpha\iota$ is the locative case of the verbal abstract in $-\mu\omicron\nu\eta$ or some analogous form. With regard to the participles in $-\mu\epsilon\nu\omicron\varsigma$, it is doubted whether the meaning is invariably and necessarily passive, though it must be owned that in most cases this force may be assigned to the word. Under the shortened form $\mu\nu\omicron-$, we have this compound affix, with a participial meaning, in such words as $\kappa\rho\acute{\eta}\delta\epsilon-\mu\nu\omicron\nu$, "a fillet," i. e. "that which is bound round the head;" $\mu\acute{\epsilon}\delta\iota-\mu\nu\omicron\varsigma$, "that which is measured" (a certain quantity of corn, Latin *modi-us*) $\beta\acute{\epsilon}\lambda\epsilon-\mu\nu\omicron\nu$, "that which is thrown" (a dart), $\gamma\nu-\mu\nu\omicron\varsigma$, "stript" (from $\acute{\epsilon}\kappa\delta\acute{\upsilon}\omega$, Pott, *Etym. Forsch.* II. p. 182); $\mu\acute{\epsilon}\rho\iota-\mu\nu\alpha$, "that which is thought of or recollected," comp. $\mu\epsilon\rho-\mu\eta\rho-\acute{\iota}\xi\omega$, $\mu\acute{\epsilon}\rho-\mu\epsilon\rho-\omicron\varsigma$, $\mu\acute{\alpha}\rho-\tau\nu\rho$, Latin *me-mor* or *mes-mor*, Sanscrit root *smṛi*. In Latin we have seen *ama-mini*, *ama-minor*; we have also the participles *alu-mnus*, "reared;" *auctu-mnus*, "increased;" *vertu-mnus*, "turned;" *da-mnum*, "given;" *æru-mna*, "a load or weight;" not, as Voss thinks, for $\alpha\acute{\iota}\rho\omicron\upsilon\acute{\mu}\epsilon\nu\omicron\nu$, but, as Pott suggests (*Etym. Forsch.* I. p. 279), connected with the Sanscrit root *yas=ad-niti* (because Sanscrit *ayas*=Latin *æs*), so that $\alpha\epsilon-\gamma\epsilon\rho$ is *qui ærumnam gerit*. We have, besides, shortened forms in $-\mu\epsilon\nu$ corresponding to the Greek infinitives in $-\mu\epsilon\nu$; thus, from the root $\kappa\omicron\lambda-$, "to raise up" (*cel-sus*, *col-lis*, Greek $\kappa\omicron\lambda\acute{\omega}\nu\eta$ $\kappa\acute{\epsilon}\lambda\lambda\epsilon\iota\nu$, *cul-mus*, *ex-cel-lere*, &c.), we have not only *colu-mna*, but *cul-men*. Bopp (*Annals of Oriental Literature*, p. 52) mentions *dis-cri-men* (which means *quod discernitur*, not, as he says, *quod discernit*), *stra-men*=*quod struitur*, *legu-men*=*quod legitur*, *præfa-men*, "what is said at the commencement" (cf. *Vergl. Gr.* p. 1115). He also compares *car-men* with the Sanscrit *karman*, "a deed," from the root $\kappa\acute{r}\acute{i}$, "to make," and with the Greek

* This word is a synonym for $\pi\omicron\iota\mu\acute{\eta}\nu$ (cf. $\iota\pi\pi\omicron\gamma\omicron\nu\acute{\omega}\mu\omega\nu$, *Jaculatr.* fr. 219), and is used figuratively to denote a king, who can see into the hearts of his subjects, in a very contorted passage which all the editors have failed to construe. *Æsch. Agam.* 768:

ὅστις δ' ἀγαθὸς προβατογνώμων
οὐκ ἔστι λαθεῖν ὄμματα φωτός
τὰ δοκοῦντ' εὐφρονος ἐκ διανοίας
ὑδαρεῖ σαίνειν φιλότῃτι.

Here $\phi\omega\tau\acute{\omicron}\varsigma$ is the antecedent to $\delta\omicron\sigma\tau\iota\varsigma$, and the meaning is "it is not possible that mere semblances of friendship should deceive the eyes of a man, who is a good discerner of character."

ποίημα=*ποιή-μεν-τ*. From the corresponding forms *carmen* and *carmētis* it seems to us probable that all the Latin neuters in *-men* were originally furnished with the objective affix *-t*, so that these words really belong to the same class with those in *-ματ*=*-μεντ* and *-mentum*. Other instances are *sû-men*=*quod sugitur*, *volu-men*=*quod volvitur*, *sê-men*=*quod seritur*, &c. The Sanscrit termination *-māna* frequently makes a participle, which has a middle or active signification, unless preceded by the syllable *-ya*, when it becomes passive; and the words *ser-mōn*, *λει-μῶν*, &c. (§ 256), may be considered as implying action.

(2) *-ναι*. This termination also has both an active and a passive participial meaning (§ 255): an active, in such words as *τέχ-νη* (from *τεύχω*), "that which makes," *τεροπ-νός*, "he who pleases," &c.; a passive, in such words as *τέκ-νον*, "that which is brought forth," *σκή-νη*, "that which is covered" (comp. *σκή-α*, *σκό-τος*, Sanscrit root *ch'had*, "to cover," Hebr. *כִּסֹּף*, Latin *squā-ma*, *ob-scu-rus*, *scū-tum*, &c.), *ὄρω-νός* (*ἑρέρω*), *θάλπ-νος*, &c. In Latin we have the same termination with an active meaning in *pæ-na* (Greek *ποι-νή*), "that which atones," comp. the Sanscrit root *pû-*, "to purify," *pe^(s)-na*, "that which flies" (Greek *πετη-νός*, *πτη-νός*); but in by far the greater number of cases it has a passive signification, as in *plē-nus*, *sā-nus*, *reg-num*, *pug-na*, more anciently *puc-na* (Greek *τυκ-νός*), *dō-num*, *lig-num*, "that which is bound" (a faggot), *vā-nus* (comp. *vacuus*), *pā-nis*, *dig-nus*, "what is shown" (*δεικ-*), &c.

(3) *-ς* or *-ις*. The analogy of the other two terminations *-μεναι*, *-ναι*, shortened to *-μειν* and *-ειν*, would lead us to expect that this ending was originally *-σαι*, an opinion which is confirmed by the distinct *ι*, which is inserted between it and the last vowel of the crude-form: thus, we have *γέλαϊς*, not *γελαῖς*, and *γέλαϊς* must be considered as analogous to *τύπτεις* for *τύπτεισι*, &c. One of the terminations which we have seen used to express the *abstractum verbale*, or action of the verb, is *-σις*, as *προᾶ-σις*, *μίμη-σις*, *λήπ-σις*, *φά-σις*, &c.; another, not quite so common, is *-τύς*, as *ἔδη-τύς*, *ἐπη-τύς*, *ἄλη-τύς*, *ὄρχησ-τύς*, *σωφρονισ-τύς*. These two endings, in *-σις* and *-τύς*, are equivalent in meaning; and the reader who has observed the changes in the second personal pronoun from *tu*, *tva*, to *si*, will not be disposed to deny the possibility of their being originally the same in form. It so happens, that the two Latin infinitives are verbals, similarly related to one another; to one ending in *-se* is a case of the Greek verbal in *-σις*; that ending in *-tum* corresponds to the Greek verbal in *τύς*. We consider the Æolic infinitive in *-σ-* or *-ις*, as a genuine representative of the former Latin infinitive: every one knows the resemblance of the Æolic dialect to the Latin, and it would have been strange, if the

Greek had retained not traces of likeness in an inflexion of so common occurrence as the infinitive mood.

Upon the whole, then, we have no hesitation in asserting that the three forms of the Greek infinitive active were originally *-μεναι*, *-ναι*, and *σαι*- or *-σει*, and that these are the locatives of three verbals. We have seen that even the two former are often used with an active sense; but if it is objected that they are more generally passive in signification, and that therefore they cannot well express the action of a transitive verb, it may be answered that the participle in *-ndus* in Latin is used more frequently in a passive than in an active signification, and yet the ablative of this participle is used like a case of the active infinitive—thus, *dandus* means “to be given,” but *dando*, “by giving;” other cases may be used in a similar manner, as *ad opes dandas* or *ad dandum opes*. Besides, although the verbals in *-μεναι* *-ναι*, which are used as active infinitives, were strictly passive, we might remark conversely, that the active participles in *-ντ* are occasionally used in an infinitive sense, in which the differences of voice seem to be neglected (see *Varron*. p. 361, note 2). The reason for all this is very plain and simple. In the indefiniteness proper to the infinitive mood, it matters little whether we consider the verb as transitive or intransitive. For instance, what difference is there in our own language between “the thing is doing” or “the thing is being done”? All this would have been seen long ago, if the Greek and Latin infinitives had not lost their case endings and become mere crude-forms. The consequence of which has been, that, although it is admitted that the Greek infinitive is to all intents and purposes a noun, to be declined by the article, the loss of the final *-αι* has prevented grammarians from discerning its relation to forms which may be declined without articles or prepositions. The Latin infinitive stands in the same predicament, except that as the Romans had other verbals still admitting of inflexion, and had no article to help out the infinitive, its employment as a noun is confined to the general objective or accusative case. As a nominative, it occurs only in later writers who were familiar with the Greek idiom. Supposing that we had not only *pugna* but *pugnamen* and *pugnatus*, we should be able to represent from one root all forms of the infinitive; *pug-nā* (*πύκ-ναι*), *pug-namine* (*πυκ-να-μέναι*), *pug-na-se*=*pug-na-re* (*πυκ-νά-σει*), *pug-na-tu* (*πυκ-να-τυί*), *pug-na-ndo*, *pug-na-tum*, &c., being all different expressions, in the way of cases, of the same idea,—“closeness for the sake of fighting.”

It is perhaps right to add that the first aorist infinitive active (as *τύπ-σαι* is, in our opinion, a representative of the third form of the infinitive, the final *s* having dropt off.

411 The ending of the Greek infinitive passive, we have seen, is invariably -σθαι. This we shall now be able to explain without difficulty. The second person plural in -σθε must have been originally -σθαι for -σθην; cf. *τύπτε-σθε* with *τύπτο-μαι* and *ἐτυπτόμην*. It is therefore not an unreasonable inference that the infinitive *τύπτεσθαι* was originally *τυπτέσθην* or *τυπτεσθῆναι*; the σ before the θ being one of those euphonic insertions which are due to the Greek predilection for the combination σθ. Consequently, *τύπτεσθαι* is ultimately identical in form with *κελευσθῆναι*. If this explanation is not satisfactory, it only remains to suppose that *τύπτεσθαι* is a representative of *τύπτε-θ-σαι*, the inserted θ being the usual mark of the passive, and the termination being the same as that of *τύπ-σαι*.

412 The -er, which marks the Latin infinitive passive, is that sign of the locative which we have seen used as the characteristic of the passive voice in the other moods. And for this reason we consider that forms like *dicier* are mutilated, and that the r, which marks the active infinitive, has been omitted between the two vowels, just as in the genitive plural of all consonantal nouns. It is obvious that *spargier* for *spargerer* (Hor. iv. *Carm.* xi. 8) is abridged on the same principle as *lapidum* for *lapiderum*. The r, which is retained in *musarum*, is also retained in the vowel-verbs, and this fuller form (as *vocarier*=*vocasyer* from *vocare*=*vocasie*) is perfectly analogous to that of the indicative passive (as *vocatur* from *vocat*).

The Sanscrit gerund in -tvā stands between the Latin infinitive -se and the Greek verbal in -τύς, just as the Sanscrit pronoun *tvam* stands between the Greek σὺ and the Latin *tu* (above, § 133).

413 (3) PARTICIPLES.

Although we have already spoken of the Greek participle in connexion with the adjective, and have endeavoured to explain the principles of its syntactical use (above §§ 300 sqq.), method requires that we should again consider it in its etymological and syntactical relation to the infinitive mood and other inflexions of the verb.

The characteristic of the participle active in the present, future, and aorists, is -nt=nd, both in Latin and Greek. This appears only in the oblique cases of the masculine and neuters, as *τύπτοντος*, *τιθέντος*, *τύψαντος*, *δεικνύντος*, *amantis*, *docentis*, &c. In the nominative masculine -ντ and -nt are always abbreviated; the s, which is the characteristic of the nominative case, being, however, invariably retained in the older conjugation: thus, for *τιθέντ-ς* we have *τιθείς*, on the analogy of *εἰς* for *ἐνς*; but for *τύπτοντ-ς* we have *τύπτων*, where the -ς is absorbed, as in *καλλίων* for *καλλίους*; for *τύψαντς* we have

τύψας; for δεικνύντες, δεικνύς; for *amants*, *amans*; for *docents*, *docens*; &c. The feminine is formed according to the principles laid down in the last book; and the neuter, by leaving out the nominative *s*; the *t* is necessarily omitted. In Latin we have occasionally a lengthened form of this word, used as an active participle, though it is generally employed as an equivalent to the Greek verbals in -τέος: we conceive that *secundus*, *moribundus*, *amabundus*, *oriundus*, are formed from *sequ*(^u)*ns*, *mori*(^u)*ns*, *ama*(^u)*ns*, *ori*(^u)*ns*, as *Agrigentum Tarentum*, *Buxentum*, &c. are from Ἀγρῳγᾶς, Τάρῳας, Βύξῳεις, where we have the transition step in the assertion that the Æolians formed these names as masculines in -εντος (Niebuhr, *Hist. of Rome*, i. note 148). The Bœotian patronymics in -ωνδας, which are undoubtedly connected with participles (above, p. 464) exhibit a similar extension of the ending, for, as we have seen, the τ of the participle belongs, like the δ- of the patronymic, to a form derived from the second pronominal element.

414 The Greek participle of the perfect active ends in -ώς, -νῳα, -ός; -ότος, -νῳας, -ότος, &c. The passive participle ends in -μενος, as we have said in speaking of the infinitives. The Latin passive participle ends in -tus, and the Greeks have a corresponding verbal in -τός. The Sanscrit active participle ends in -nt, like the Greek and Latin, with the exception of the perfect participle, of which the terminations are -us, -ushî.

We cannot agree with some modern scholars (Pott, *Etymol. Forsch.* i. p. 92; Giese, *Æol. Dial.* p. 103; Bopp, *Krit. Gramm.* rule 186) in considering the Greek and Sanscrit perfect participles as sprung from the same form with the present. There is no trace throughout of the *n*, which appears so essential to the ordinary participle form, and, though it may be said that there is an appearance of a weaker as well as a stronger form in the declension of the Sanscrit participle, yet this does not go so far as to establish an identity between this participle and one in which the weaker form is consistently employed. It is very probable that the Sanscrit perfect participle contains the Sanscrit ending -vat, which we find in *tâ-vat*, "so much." *dhana-vat*, "rich," &c. The Greek perfect participle ends in -For, as appears from the neuter -For for -For, and the oblique cases -Fót-os, &c. The nominative masculine in -ως is a representative of -For, the length of the vowel being a compensation for the lost consonants. The feminine in -νῳα and the lengthened î would seem to point at once to the loss of an aspirate or digamma, and of a sibilant, so that this form is perfectly analogous to the Sanscrit. We have remarked above (§ 329), the connexion between ἡρ-φαοῖ-ος and ἡρως=

ἡρ-*φαοτ*-ς. The affinity between this termination -*ῶτ* or -*φοτ*, the Sanscrit -*vat*, and the common adjective ending -*κος*, will appear from the following considerations. That *πατριός* and *πατρῷος* are all but synonyms is well known (see Hermann *ad Eurip. Bacch.* 1362; Neumann *ad Aristot. Rerumpubl. Reliquias*, p. 65). Now we find that *πατριός*, *πατρὺς*, *πάτριος*, *πατρῷος*, are also nearly synonymous; and that these words are merely by-forms, no etymologist will deny. We likewise find *μητριά*, apparently the feminine of *μήτριος* and *μητριός*; also the adjective *μητρικός*. It appears to us that all these words, as well as the Latin *patruus*, Sanscrit *pitṛīvyas*, belong to the same class as the perfect participles. The feminine termination -*νῖα* sometimes occurs in words apparently participles, but evidently not perfects, as *ἄρπυιαι* (*ἄρπυιᾶς*), *ἄγνῖα* (*ἄγνῖδος*), *ὄργνῖα* (*ὄργῖδος*), (above, § 296). It has been already mentioned (§ 257) that the Sanscrit feminine corresponding to these forms in -*νῖα* is -*ushī*: thus, *τετυρνῖα* = *tutupushī*. According to this analogy we may class the Latin noun *sec-ūri-s* = *sec-usi-s*, "the cutter," with the participial forms just mentioned (see Bopp, *Vergl. Gr.* p. 1097).

415 The participle termination in -*nt* is an adverbial formation from a verbal root, bearing the same relation to the forms in -*δ*-, -*dus*, that the adverb *i-nde* opposed to *i-bi* does to *αὐτό-θεν* opposed to *αὐτό-θι* (*Varron.* p. 290). It is formed, as we have already intimated (§ 263), by appending the second pronominal element, in the form *δ*- = *τF* or *τ*, to an inflexion in *ν*, of the simplest verbal noun, so that it differs from the common verbal noun in -*δ*, as *οἰκονδε* differs from *οἰκο-θεν*, or the adverb *κρουσανδόν* from its other forms *κρούβδα* and *κρουσηδόν*. It is only by considering it in this way that we can harmonize all the phenomena. On the one hand, the verbals in -*τος*, -*τέος*, which so nearly correspond in meaning (*Gr. Gr.* p. 190), and evidently belong to an original from -*τέφος*, Sanscrit *tavya*, are thus brought into unison with the verbals in -*dus* (*cupidus*, &c.) and the gerundives in -*ndus*, which are only lengthened forms of participles in -*nt* (cf. *sequens* with *secundus*); and on the other hand the exact correspondence in meaning of the gerunds in -*ndi*, -*ndo*, -*ndum* and the supines in -*tum*, -*tu*, finds its explanation in the identical use of the adverbs in -*νδον*, which connect themselves with the former, and those in -*tim*, which are obviously cases of the latter. Even in its extended form -*tio(n)*, this verbal in -*tus*, -*tis*, retains its active force, and we have constructions like *hanc digito tactio*, "a touching of her with the finger," *huc receptio ad te meum virum*, "a receiving of my husband here into your house," &c. (Bopp, *Vergl. Gramm.* p. 1255). To the same class belong the nouns of agency in -*της*, -*τηρ*, -*tor*, and their active force

is shown in the future participles in *-turus* (cf. *genitor*, &c. with *geniturus*, &c.).

The passive participle in *-μενος*, to which we have already referred in speaking of the infinitive in *-μεναι* (§ 410, (1)), seems to us most naturally explicable as a derivative from the noun of agency in *-μεν*. In itself therefore it is not essentially passive. But the analogy of the Greek and Latin languages furnishes us with many examples of this interchange of meaning when the noun of agency passes into an attribute. Thus we have seen that even the noun of agency in *-της*, when it is used adjectivally, may become equivalent to a passive participle (above, § 254, p. 455). Similarly, the verbals in *-τός*, *-τέος*, which properly express the meaning of the active infinitive, and which not only govern a case, in such phrases as *τους φίλους εύεργετητέον ἐστί*, but express a capacity of action, as in *Soph. Trach.* 466: *εἴ τι τῷ μῶ ἀνδρὶ μεμπτός εἰμι*, are not only apparently passive, when predicated directly in such phrases as *ὠφελήτεια σοι ἡ πόλις ἐστίν*, but actually passive in such instances as *αἰρετος*, which denotes not only "eligible," i. e. "a man to choose, capable of being chosen" (*eligendus*), but "chosen" (*electus*). It may of course be said that in this case the termination *-τός* is not a mutilation of *-τέος*, but a merely objective affix of the third pronominal element like the Latin and Sanscrit passive participles in *-tus -tas*, and reference may be made to the corresponding use of the verbal adjectives in *-νος* (above, § 253). Allowing that this is still an open question, it may be observed on the other hand that we have an active infinitive in *-ναι* as well as *-μεναι*, and as the superlative-ordinals in *-tus* and *-mus* may have sprung from the fuller form in *-ti-mus* (above, § 164), it is certainly not impossible that *-ναι* represents only a part of *-μεναι*, the specially objective part, and that these adjectives in *-νος* are explicable in the same manner. At any rate, it is sufficiently clear that the participles in *-μενος* and *-tus* are used with a passive signification, even when the verbs, to which alone they can be referred, have a deponent signification. For example, we have the following passive participles from deponent verbs: *ἀπηγγημένος* (*Herod.* i. 207, ix. 29); *ῥητιαμένος* (*Thucyd.* iii. 61); *κεκτημένος* (*Id.* vii. 70); *ἐξειργασμένος* (*Æsch. Pers.* 517; *Agam.* 1352); *ἐντεθνημένος* (*Plat. Crat.* p. 404 A); *λησόμενος* (*Soph. El.* 1248); *complexus* (*Cic. Rosc. Am.* 13, 37); *partitus* (*Liv.* xxvii. 8, xxviii. 19); *adeptus* (*Sall. Cat.* 7); *opinatus* (*Cic. Tusc.* iv. 6, iii. 31; *Offic.* ii. 6); *meditatus* (*Offic.* i. 8); *interpretatus* (*Sall. Jug.* 17; *Cic. Divin.* i. 52); *periclitatus* (*Cic. Læl.* 17); *detestatus* (*de Leg.* ii. 11, 28); *confectus* (*Sall. Jug.* 17). And conversely we have participles in *-μενος*, *-tus* with a transitive or deponent signification, when there are no deponent verbs to which they can be referred, as *οἰκημένος*

(Herod. i. 27, vii. 21); *consideratus* (Cic. *Cæcin.* 1), and the common instances, *cautus*, *circumspectus*, *exosus*, *falsus*, *tacitus*, &c. (Lubker, *de Participiis*, p. 20). It seems to us that the simplest way of meeting these difficulties is to connect the participial form with the infinitive, and to direct the student's attention, as we have done elsewhere (*Varron.* p. 361), to the fact that the difference between active and passive really becomes evanescent in the infinitive use of a verb.

416 It will be inferred from what we have said, that we consider the participle as ultimately identical with the infinitive. In usage they are different, and the difference consists in this, that the infinitive, originally a participle or verbal noun in the locative case, has, in process of time, lost all traces of its inflexion, and may be considered as the most general and crude form in which the verb can appear—*γενικώτατον καθέστὸς τῶν ἄλλων ὀημάτων*, as Apollonius says (*Syntax.* iii. 13, p. 229 Bekk.): whereas the participle, instead of being a particular case, the locative or instrumental, of a verbal form, has received or retained a set of inflexions which constitute it a mixture of adjective and verb. It will be remembered, however, that the participle becomes an adjective only in the same way in which the infinitive, and consequently the participle itself, when not joined to some noun, becomes a substantive, namely, by the syntactical contrivance which we call prefixing the definite article (above, § 300).

417 There are adjectives which have the same termination as the active participle, for instance *χαρίεις*=*χαρίεντ-ς*. These adjectives, however, do not express an action, but a quality, and therefore may be joined to a substantive as an epithet without an article, or even, as we have shown on a former occasion, become to all intents and purposes a substantive. Thus *χαρίεις ἄνθρωπος* means simply "an agreeable man;" *τιθεὶς ἄνθρωπος*, on the contrary, could not mean "a placing man" or "a man who is in the act of placing," but "a man, when or if he is placing," an hypothesis of some kind of action being implied. In the case, however, when the article is prefixed, the participle and adjective stand on the same footing: *ὁ χαρίεις ἄνθρωπος*, or *ὁ χαρίεις*, means "the agreeable man;" *ὁ τιθεὶς ἄνθρωπος* or *ὁ τιθεὶς*, "the placer." And in this relation the participle and infinitive are virtually identical: *τῷ τιθέναι* and *τῷ τιθέντι* equally signify "by the placing."

418 It is a theory of Grimm's (*Deutsche Grammatik*, i. pp. 1020 foll.), that the Teutonic infinitive was originally declinable, the ordinary form in *-an* being the accusative, which is also used substantively as the nominative, and the forms in *-annes*, *-anne*, &c.,

representing the genitive and dative respectively. Grimm recognises the genitive in the new High German forms *meidens*, *fragens*, &c., and the dative in the common infinitives *meiden*, *fragen*, on the analogy of *zeichen*=*signo*, and *regen*=*pluvio*. He adds (p. 1022), "an unorganic participle in *-nd*, declinable like an adjective, and with a passive-signification, has gradually developed itself out of the old *nn* and the preposition *ze* prefixed, by an interchange with *nd*, just as *niemannes* has become *niemandes*: thus we have *ein zu lésender* (*legendus*), *ein zu gëbender* (*dandus*). Perhaps there is still time to expel from the language this stiff and unnatural formation." We cannot agree with the great philologist in his disapprobation of this form, which seems to us to be confirmed by every analogy. Our English infinitive is the mutilated form of the dative of such a participle or gerund. Thus, in Wickliff's Bible we have *thou that art to comynge*, which corresponds to the Anglo-Saxon *þu þe to cumenne eart* (see *Diversions of Purley*, Vol. i. pp. xxxiii, 450, Vol. ii. p. 505, Taylor's Edition). Rask says that the present infinitive in Anglo-Saxon is never used with the particle *to* as in modern English, though the gerund always requires *to*, whence he concludes that the gerund is nothing but the dative of the infinitive (*Anglo-Saxon Grammar*, § 400). In our opinion the infinitive was originally the participle in *-nt*, which became *-nd* in German, while the flexion form of the old Saxon, which inserted *j* before the case-ending, as in *slāpandjes*=*dormientis*, led to the English *-nge* and *-ng*. This participle, when used as an infinitive, lost its inflexion, and could only be used as a gerund or case by means of the auxiliary preposition *zu* or *to*. It also suffered mutilation, being deprived of its final *d* in German, and reduced to the crude-form of the word in English. The forms in *-nn* are assimilations for which we have many analogies in the Teutonic languages.

419 The Latin and Sanscrit languages, which have no definite article, and have therefore retained their inflexions longer than the Greek, afford us a direct proof of the view which we have taken of this question. The Latin expresses by cases of the lengthened participle in *-ndus*, and the verbals in *-tum*, *-tu*, those relations, which, in Greek, are generally conveyed by the infinitive with the definite article:—Priscian calls all these cases *gerundia*: *gerundia quoque vel participialia, quum participiorum videantur habere obliquos casus, nec tempora significant, quod alienum est a verbo (legendi, legendo, legendum, lectum, lectu)*; *infinitivi tamen vice funguntur, quod solet apud Græcos articulis conjungi* (p. 808). They had also an infinitive, which, like the Greek, was a mutilated form of the locative of a ver-

bal in *-sis*, but as they had no definite article, they could not treat this as the Greeks did their infinitive; it remains, therefore, as the mere crude-form, expressing the action of the verb, and perfectly equivalent to the verbal in *-tum*. The Sanscrit expresses all the relations of gerund and infinitive by verbal-forms in *-tvâ*, *-ya*, *-tum*. The last of these is equivalent to the Latin verbal in *-tum*: deprived of its final letter, it may form the first part of a compound word, like any other crude-form; thus we have such words as *jê-tu-kâma*, "desirous of vanquishing," &c. The verbal in *-tvâ* is either the instrumental in *-â*, or a remnant of the locative in *-âm*; cf. *tvam* and *τῷ*. The verbal in *-ya*, which is only formed from roots compounded with prepositions, and has therefore lost its case-ending, owing to the weight of the forms in which it is found, must be considered as the corresponding case of a similar participle in *-ya*. All these three, then, are verbals formed by means of the second pronominal element, which we have seen of so much use in the formation of abstract nouns. The elements *-tva* and *-ya* are combined to form the future ending *-tavya*, which is equivalent in meaning to the Greek verbal in *-τέος* (perhaps *τέφος*), and to one use of the Latin participle in *-ndus*.

420 The oblique cases of participles in Greek, Latin, and Sanscrit, are often used absolutely, that is, they form, in combination with nouns in the same case, a distinct though subordinate sentence without the intervention of any finite verbs. When we use the infinitive with an oblique case of the article, as in *τῷ τιθέναι*, "by the placing," we employ it as an abstract noun with a general reference. When we use the instrumental or genitive case of the participle, we imply hypothetical placing, of which, however, the agent or instrument is some individual, so that the verb-form has an adjectival, but predicative value. When this individual is expressed in the same case, we understand that a supposition is made with regard to his placing: and thus *Διοδώρῳ τιθέντι* or *Διοδώρου τιθέντος, τοιαῦτ' ἔτι γίγναι' ἔν*, means "that as often as Diodorus placed, certain things would ensue by or out of that action of his." We endeavoured to show, when speaking of the adjective (above, § 300), that the participle must always be understood in this way, when it appears, not as an attributive word or epithet, but as a predicate, that is, when it is unaccompanied by the article. In modern German the predicate, whether adjective or participle, is not only distinguished by the want of the article, but also by mutilation in its inflexions. And here it must be remarked, that the German language possesses a logical advantage over all others; for it not only marks a distinction between the attributive used without the article and the attributive preceded by it—as *gute-r*

Mensch, der gute-Mensch,—but also between the epithet in this last case and the predicate—as in *der Mensch ist gut* (see Grimm, *Deutsche Grammatik*, iv. p. 577). This is surely the ultimate refinement of a language in a logical or syntactical state. The German and Latin, however, fall short of the Greek in one use of the absolute participle. They rarely express the whole hypothesis by a single participle, in other words, they do not often use the absolute participle or predicate impersonally, but generally and as a rule add the subject. “The German and Latin syntax,” says Grimm (iv. p. 894), “generally requires that the subject should be expressed by the side of the absolute participle: the Greek, which is freer and less constrained, allows us to use absolutely the participles of impersonal verbs, whose subject is not defined: e. g. ὕοντος πολλῶ (not πολλοῦ), ‘when it was raining hard;’ σαλπίζοντος, ‘as we was sounding the trumpet.’ I am not able to adduce a Latin *pluente*, *ningente*, *buccinante*, in any such sense; still less a Gothic *rignjandin* or *atrignjandin*, *haurnjandin*, or *at haurnjandin*, although such absolute constructions are conceivable. Least of all would it be allowable in the dialects which prefix the indefinite *es* to their impersonal verbs. It was necessary always to subjoin a definite subject to the absolute participle; e. g. in old High German *reganôntin himile*; Gothic *at rignjandin himina*; Latin *cælo pluente*. It is only by way of exception that certain Latin and German formulæ allow the omission of the subject; e. g. *comperto*, *posito*; new High German *gesetzt*, *kaum gesagt*, *anders ausgedrückt*.” When a participle is used absolutely in Sanscrit it generally appears connected with some noun in the locative case, which is the proper inflexion for this construction; the genitive and ablative cases, which are the most common forms in Greek and Latin respectively, seem to owe their employment for this purpose to their having superseded the old locative. The following instance is given by Wilkins (*Sanscrit Grammar*, p. 632):

mṛitê pitari, tē vîrâ, vanād êtya sva mandirañ,
na-chirād êva vidvânsô vêdê dhanushi-cha a-bhavan,

“their father being dead (locatives), those heroes, by the having gone (verbal in *-ya*) from the forest to their own abode, after no long time even, became skilled in the *Vêda* and in the bow” (we observe, by the way, that *chira* is the modern form of *jira* from *jara-s*, γῆρας: *ajira-s* is found in the *Rig-Vêda*: see Lassen’s *Antholog. Sanscritica*, p. 97, l. 10, and note 1). It is a remarkable instance of the looseness of the Indian syntax, that the indeclinable verbals in *-ya* and *-tvâ*, which are obviously fragments of cases (above, § 419), may be used absolutely, though the nominative case of the sentence is not the noun to which they refer: either with an active sense, as in the

Hitôpadêça, p. 10, l. 185: *iti uk-tvâ, çanaih çanair upagam-ya, têna vyâghreña dhritah sa pânthah achintayat*, "when he (the tiger) had thus spoken, and had come up to him slowly, slowly, the traveller, caught by the tiger, began to reflect,"—where *uk-tvâ* and *upagam-ya* refer to *vyâghreña*, the instrumental of *vyâghra-s*, whereas *pânthah* is the nominative to the verb *achintayat*;—or with a passive sense, as in *Nalus*, xiv. 17:

krôdhâd-asûyayi-tvâ tañ, rakshâ mê blavatah kṛitâ,

"as I (the serpent) have cursed him in anger, thy preservation has been effected by me." It is unnecessary to dwell upon these Sanscrit forms: the reader who is curious about them will find acute reasoning on the subject, fortified by an abundance of examples, in a paper by W. von Humboldt in the *Indische Bibliothek*, Vol. i. pp. 433 foll.; Vol. ii. pp. 72 foll.

421 PARADIGMS.

* Having thus investigated all the inflexions of person, tense, and mood, which distinguish the verb in the three classical languages of the Indo-Germanic family, we shall, for the sake of the younger student, select an example or paradigm from each of these languages, in order that the principles of classification which we propose may be more evident. We shall take the Greek language first, because it possesses the most complete system of moods and tenses; then the Sanscrit, which falls short of it in this respect; and, lastly, the Latin, which is the most defective.

In the arrangement of the tenses and moods in the following paradigms, we have adopted the more general division into definite and indefinite tenses, and, making the active voice of the Greek verb the basis of comparison, we have five definite tenses and as many indefinite. The order in which we have taken these tenses is chosen rather from etymological considerations, than from regard to the connexion of past, present, and future time. We have given not only the forms which really occur or might occur in classical Greek or Latin, but also those which we infer must have existed in the oldest state of the language. The three roots we have chosen are all analogous in point of meaning, and identical etymologically in the Sanscrit and Latin.

422 I. Greek root *τυπ-*; pronominal suffix *-τ-*.

(1) *Active voice, or, verb with person-endings in the instrumental case.*

(a) INDICATIVE MOOD.

1st DEFINITE TENSE.

(Present Indicative).

Supposed original forms.	Existing forms.
τύπ-το-μι	(τύπτω)
τύπ-τε-σι	(τύπτεις)
τύπ-τε-τι	(τύπτει)
	
	(τύπτετον)
	(τύπτετον)
τυπ-τό-μεσι	(τύπτομεν)
τυπ-τέ-τεσι	(τύπτετε)
τύπ-το-ντι	(τύπτουσιν(ν))

1st INDEFINITE TENSE.

(Imperfect).

Supposed original forms.	Existing forms.
ἐ-τύπ-το-μι	(ἐτυπτον)
ἐ-τύπ-τε-σι	(ἐτυπτες)
ἐ-τύπ-τε-τι	(ἐτυπτεν)
	
	(ἐτύπτετον)
	(ἐτυπτέτην)
ἐ-τυπ-τό-μεσι	(ἐτύπτομεν)
ἐ-τυπ-τέ-τεσι	(ἐτύπτετε)
ἐ-τύπ-το-ντι	(ἐτυπτον)

2nd DEFINITE TENSE.

(Perfect).

τετύπ-(^h)α-μι	(τέτυφα)
=τε-τύφα-μι	
τετύφα-σι	(τέτυφας)
τετύφα-τι	(τέτυφεν)
	
	(τετύφατον)
	(τετύφατον)
τετυφά-μεσι	(τετύφameν)
τετυφά-τεσι	(τετύφατε)
τετύφα-ντι	(τετύφασιν)

2nd INDEFINITE TENSE.

(Plus-Perfect).

ἐ-τετυφέα-μι	(ἐτετύφειν)
ἐ-τετυφέα-σι	(ἐτετύφεις)
ἐ-τετυφέα-τι	(ἐτετύφει)
	
	(ἐτετύφειτον)
	(ἐτετυφέτην)
ἐ-τετυφεγά-μεσι	(ἐτετύφameν)
ἐ-τετυφεγά-τεσι	(ἐτετύφαιτε)
ἐ-τετυφέα-ντι	(ἐτετύφεισαν)

3rd DEFINITE TENSE.

(Future).

τύπ-σο-μι	(τύψω)
τύπ-σε-σι	(τύψεις)
τύπ-σε-τι	(τύψει)
	
	(τύψετον)
	(τύψετον)
τυπ-σό-μεσι	(τύψομεν)
τυπ-σέ-τεσι	(τύψετε)
τύπ-σο-ντι	(τύψουσιν)

3rd INDEFINITE TENSE.

(Aorist).

ἐ-τύπ-σα-μι	(ἐτυψα)
ἐ-τύπ-σα-σι	(ἐτυψας)
ἐ-τύπ-σε-τι	(ἐτυψεν)
	
	(ἐτύψατον)
	(ἐτυψάτην)
ἐ-τυπ-σά-μεσι	(ἐτύψameν)
ἐ-τυπ-σά-τεσι	(ἐτύψατε)
ἐ-τύπ-σα-ντι	(ἐτυψαν)

(b) SUBJUNCTIVE AND OPTATIVE MOODS.

4th DEFINITE TENSE.

(Present Subjunctive, or Present Desiderative).

Supposed original forms.	Existing forms.
--------------------------	-----------------

τύπ-τυ-ομι	(τύπτω)
------------	---------

τύπ-τ-γα-σι	(τύπτῃς)
-------------	----------

τύπ-τ-γα-τι	(τύπτῃ)
-------------	---------

.....

(τύπτῃτον)

(τύπτῃτον)

τυπ-τ-γό-μεσι	(τύπτωμεν)
---------------	------------

τυπ-τ-γά-τεσι	(τύπτῃτε)
---------------	-----------

τύπ-τ-γο-ντι	(τύπτωσιν)
--------------	------------

4th INDEFINITE TENSE.

(Present Optative, or Past Desiderative).

Supposed original forms.	Existing forms.
--------------------------	-----------------

(ἐ)-τύπ-τ-γο-μι	(τύπτοισι)
-----------------	------------

(ἐ)-τύπ-τ-γα-σι	(τύπτοισις)
-----------------	-------------

(ἐ)-τύπ-τ-γα-τι	(τύπτοι)
-----------------	----------

.....

(τύπτοισιν)

(τυπτοίστην)

(ἐ)-τυπ-τ-γό-μεσι	(τύπτοισμεν)
-------------------	--------------

(ἐ)-τυπ-τ-γά-τεσι	(τύπτοιστε)
-------------------	-------------

(ἐ)-τύπ-τ-γο-ντι	(τύπτοισιν)
------------------	-------------

5th DEFINITE TENSE.

(Desiderative Verb in -σείω).

τύπ-σγο-μι	(ταπ-σε-ίω)
------------	-------------

&c.

&c.

5th INDEFINITE TENSE.

(Æolic Aorist Optative).

(ἐ)-τύ-σγα-μι	(τύπ-σεια)
---------------	------------

&c.

&c.

And so on through the other tenses in the later state of the language.

(c) IMPERATIVE.

Direct Command (Present Imperative).

Supposed original forms.

Existing forms.

τύπ-τε-(θι)

τυπ-τέτω

.....

(τύπτε)

(τυπτέτω)

.....

(τύπτετον)

(τυπτέτων)

.....

τυπ-τέ-τε-σι

τυπ-τό-ντω

(τύπτετε)

(τυπτόντω-ν)

And so on through the other tenses.

(d) INFINITIVE.

The mere state or action.

τυπ-τέ-μεναι

τυπ-τέ-ναι

τύπ-σαι-ς

(τύπτειν)

(τύψαι)

And similarly in the other tenses.

- (2) *Reflexive voice, or verb with person-endings in the locative case.*

Two of the tenses of the indicative will be sufficient to show the principle.

1st DEFINITE TENSE. (Present).		1st INDEFINITE TENSE. (Imperfect).	
Supposed original forms.	Existing forms.	Supposed original forms.	Existing forms.
τυπ-τό-μην	(τύπτομαι)	ἐ-τυπ-τό-μην	(ἐτυπτόμην)
τυπ-τέ-σην	(τύπτει)	ἐ-τυπ-τέ-σην	(ἐτύπτου)
τυπ-τέ-την	(τύπτεται)	ἐ-τυπ-τέ-την	(ἐτύπτετο)
	(τυπτόμεθον)		(ἐτυπτόμεθον)
	(τύπτεσθον)		(ἐτύπτεσθον)
	(τύπτεσθον)		(ἐτυπτεσθην)
τυπ-το-μέ-θην	(τυπτόμεθα)	ἐ-τυπ-το-μέ-θην	(ἐτυπτόμεθα)
τυπ-τέ-σ-θην	(τύπτεσθε)	ἐ-τυπ-τέ-σ-θην	(ἐτύπτεσθε)
τυπ-τό-ντην	(τύπτονται)	ἐ-τυπ-τό-ντην	(ἐτύπτοντο)

- (3) *Passive voice, or formations with the element thya, or ya, the person-endings being still in the instrumental case.*

1st AORIST or full form.		2nd AORIST or contracted form.	
ἐ-τύφ-θγα-μι	(ἐτύφθην)	ἐ-τύπ-γα-μι	(ἐ-τύπην)
ἐ-τύφ-θγα-σι	(ἐτύφθης)	ἐ-τύπ-γα-σι	(ἐτύπης)
ἐ-τύφ-θγα-τι	(ἐτύφθη)	ἐτύπ-γα-τι	(ἐτύπη)
			
	(ἐτύφθητον)		(ἐτύπητον)
	(ἐτυθφήτην)		(ἐτυπήτην)
ἐ-τυφ-θγά-μεσι	(ἐτύφθημεν)	ἐ-τυπ-γά-μεσι	(ἐτύπημεν)
ἐ-τυφ-θγά-τεσι	(ἐτύφθητε)	ἐ-τυπ-γά-τεσι	(ἐτύπητε)
ἐ-τύφ-θγα-ντι	(ἐτύφθησαν)	ἐ-τύπ-γα-ντι	(ἐτύπησαν)

From these are formed futures with person-endings in the locative case, *τυφθήσομαι, τυπήσομαι*, like *τετύψομαι* from *τέτυφα*, and we have recognised the suffix -θη in the infinitive *τύπτεσθαι* = *τυπτεσθῆναι* (§ 411).

The very complete, and indeed superabundant set of inflexions, which this paradigm assigns to the Greek verb, hardly falls to the lot of any single verb in the writings which have come down to us. Like every other copious language, the Greek has more than one word to express our every-day actions, and thus the verbs of very common use generally work together in a sort of co-partnership; one furnishes the aorist, another supplies the future, and so on: the verb signifying "to go or come," for instance, has made up its tenses from four

different roots: present, ἔρχομαι; imperfect, ἦεν or ἦα*; future, εἶμι; aorist, ἦλθον; perfect, ἦκω and οἶχομαι. The long list of defective verbs, which we find in every Greek grammar, is a proof of the richness, not of the poverty, of the language.

423 II. Sanscrit root *tud-*.

1st DEFINITE TENSE.

(Present Indicative).

Parasmaipadam. Âtmanêpadam.

tudâ-mi tudê (for *tuda-mê*)*tuda-si tuda-sê**tuda-ti tuda-tê**tudâ-vas tudâ-vahê**tuda-thas tudê-thê**tuda-tas tudê-tê**tudâ-mas tudâ-ma-hê**tuda-tha tuda-dhvê**tuda-nti tuda-ntê*

1st INDEFINITE TENSE.

(Imperfect Indicative).

Parasmaipadam.

Âtmanêpadam.

*a-tuda-m**a-tudê* (for *a-tuda-mê*)*a-tuda-s**a-tuda-thâs**a-tuda-t**a-tuda-ta**a-tudâ-va**a-tudâ-vahi**a-tuda-tam**a-tudê-thâm**a-tuda-tâm**a-tudê-tâm**a-tudâ-ma**a-tudâ-ma-hi**a-tuda-ta**a-tuda-dhvam**a-tuda-n**a-tuda-nta*

2nd DEFINITE TENSE (Perfect Indicative).

Parasmaipadam.

Âtmanêpadam.

*tu-tôda(m)**tu-tudê* (for *tu-tuda-mê*)*tu-tôd-i-tha**tu-tud-i-shê**tu-tôda(t)**tu-tudê* (for *tu-tuda-tê*)*tu-tud-i-va**tu-tud-i-va-hê**tu-tuda-thus**tu-tudâ-thê**tu-tuda-tus**tu-tudâ-tê**tu-tudi-ma**tu-tudi-ma-hê**tu-tuda(tha)**tu-tudi-dhvê**tu-tudus* (for *tu-tuda-nti*) *tu-tudi-rê* (for *tu-tuda-ntê*)

The Plus-Perfect,
or corresponding
2nd Indefinite
Tense, it want-
ing.

* That ἡρόομην must be left to ἄρχομαι, and that the only imperfect of ἔρχομαι is ἦεν or ἦα, is now a recognised fact. It was first pointed out by Elmsley (*ad Eurip. Heracl.* 210), and Cobet has shown (*Variae Lectiones*, 1854, p. 32), by an interesting proof, that we may safely restore the true form in the few passages where the corruption is still retained. For though there is no variation in the MSS. of Thucyd. iv. 121: *ἰδίᾳ δ' ἐταινίουν τε καὶ προσήρχοντο ὡς ἀθλητῇ*, we find in Julius Pollux, iii. 152: *Ξενοφῶν γὰρ εἰρηγεν· ἐταινίουν τε καὶ προσήεσαν ὥπερ ἀθλητῇ*, where, although he writes Xenophon for Thucydides, he obviously refers to the passage in question, and as our oldest MS. of Thucydides is not earlier than the 14th century, we must prefer the reading which appeared in the text in the reign of Commodus. The cause for the corruption has often been the apparent identity of the forms ἦμεν, ἦτε, ἦσαν with those of the substantive-verb. And in one case the scribe has not hesitated to substitute ἦλθες for ἦσθα, i. e. in Æsch. *Agam.* 494, where the metre necessitates the true form of the imperfect.

3rd DEFINITE TENSE.

(Future Indicative) wanting.

Parasmaipadam.

*a-taut-sa-m**a-taus-sî-s**a-taut-sî-t**a-taut-s-va**a-taut-tam**a-taut-tâm**a-taut-s-ma**a-taut-ta**a-taut-sus*

3rd INDEFINITE TENSE.

(Aorist Indicative).

Âtmanepadam.

a-tut-si (for *a-tut-sa-mê*)*a-tut-thâs* (for *a-tut-sa-sê*),*a-tut-ta* and so on*a-tut-s-va-hi**a-tut-sâ-thâm**a-tut-sâ-tâm**a-tut-s-ma-hi**a-tud-dhvam**a-tut-sa-ta*

It is doubtful whether the Potential, which follows, is the 4th DEFINITE TENSE, or the 4th INDEFINITE TENSE deprived of its augment (above, § 339).

Parasmaipadam.

*tudê-ya-m**tudê-s**tudê-t**tudê-va**tudê-tam**tudê-tâm**tudê-ma**tudê-ta**tudê-yu-s*

Âtmanepadam.

*tudê-ya(mê)**tudê-thas**tudê-ta**tudê-va-hi**tudê-yâ-thâm**tudê-yâ-tâm**tudê-ma-hi**tudê-dhvam**tudê-ran*

5th DEFINITE TENSE

(Desiderative).

Parasmaipadam

*tôt-s-yâ-mi**tôt-s-yâ-si**tôt-s-yâ-ti**tôt-s-yâ-vas**tôt-s-yâ-thas**tôt-s-yâ-tas**tôt-s-yâ-mas**tôt-s-yâ-tha**tôt-s-yâ-nti*

Âtmanepadam.

tôt-s-yê (for*tôt-s-ya-mê*)*tôt-s-ya-sê**tôt-s-ya-tê**tôt-s-yâ-va-hê**tôt-s-yê-thê**tôt-s-yê-tê**tôt-s-yâ-ma-hê**tôt-s-ya-dhvê**tôt-s-ya-ntê*

5th INDEFINITE TENSE.

(Aorist Optative).

Parasmaipadam.

*a-tôt-s-yam**a-tôt-s-ya-s**a-tôt-s-ya-t**a-tôt-s-yâ-va**a-tôt-s-ya-tam**a-tôt-s-ya-tâm**a-tôt-s-yâ-ma**a-tôt-s-ya-ta**a-tôt-s-ya-n(ti)*

Âtmanepadam.

a-tôt-s-yê (for*a-tôt-s-ya-mê*)*a-tôt-s-ya-thâs**a-tôt-s-ya-ta**a-tôt-s-yâ-va-hi**a-tôt-s-yê-tham**a-tôt-s-yê-tam**a-tôt-s-yâ-ma-hi**a-tôt-s-ya-dhvam**a-tôt-s-ya-nta*

IMPERATIVE.

Parasmaipadam.	Âtmanêpadam.
<i>tudâ-ni</i>	<i>tudai</i>
<i>tuda</i>	<i>tuda-sva</i>
<i>tuda-tu</i>	<i>tuda-tâm</i>
<i>tudâ-va</i>	<i>tudâ-va-hai</i>
<i>tuda-tam</i>	<i>tudê-thâm</i>
<i>tuda-tâm</i>	<i>tudê-tâm</i>
<i>tudâ-ma</i>	<i>tudâ-ma-hai</i>
<i>tuda-ta</i>	<i>tuda-dhvam</i>
<i>tuda-ntu</i>	<i>tuda-ntâm</i>

INFINITIVE AND GERUND.

*tôt-tum**tut-tvâ*

The passive is formed from the *Âtmanêpadam* by the insertion of *ya* in the conjugational tenses.

424 III. Latin root *tud-* with *anusvâra*.

1st DEFINITE TENSE.

(Present Indicative).

1st INDEFINITE TENSE.

Wanting.

Active.

Passive.

<i>tu-n-do(m)</i>	<i>tu-n-d-or (tundo-mer)</i>
<i>tu-n-di-s</i>	<i>[tu-n-de-re]</i>
<i>tu-n-di-t</i>	<i>tu-n-di-tur</i>
<i>tu-n-di-mus</i>	<i>tu-n-di-mu[se]r</i>
<i>tu-n-di-tis</i>	<i>[tu-n-di-mini or -minor]</i>
<i>tu-n-du-nt</i>	<i>tu-n-du-ntur</i>

2nd DEFINITE TENSE (*Perfect Indicative*).

Active.

Passive.

<i>tu-tudi (tutudsa-m)</i>	Wanting.
<i>tu-tudi-sti (tutudsa-si)</i>	
<i>tu-tudi-t (tutudsa-ti)</i>	
<i>tu-tudi-mus, &c.</i>	
<i>tu-tudi-stis</i>	
<i>tu-tudê-runt</i>	

3rd DEFINITE TENSE (used under the form *-âm, -ês, &c.*, as *Future Indicative*; under the form *-âm, âs, &c.*, as *Present Subjunctive*).

<i>tu-n-dâ-m</i>	<i>tu-n-da-r (for tu-n-da-mer)</i>
<i>tu-n-dâ-s (or -dê-s)</i>	<i>tu-n-da-ris (or -dê-ris)</i>
<i>&c.</i>	<i>&c.</i>

3rd INDEFINITE TENSE (*Imperfect Subjunctive*).

<i>tu-n-de-re-m</i>	<i>tu-n-de-re-r</i> (for <i>tu-n-de-se-mer</i>)
<i>tu-n-de-re-s</i>	<i>tu-n-de-rê-ris</i>
&c.	&c.

The 4th DEFINITE TENSE would be formed in *-rio*, if it existed in this particular verb.

IMPERATIVE.

Active.	Passive.
<i>tu-n-de</i>	[<i>tu-n-de-re</i>]
<i>tu-n-di-to</i>	<i>tu-n-di-tor</i>
<i>tu-n-di-tote</i>	[<i>tu-n-di-minor</i>]
<i>tu-n-du-nto</i>	<i>tu-n-du-ntor</i>

INFINITIVE AND GERUND.

<i>tu-n-de-re</i>	<i>tu-n-de-ri-er, tu-n-di-er, tu-n-di</i>
<i>tun-sum</i>	<i>tu-n-de-ndus</i>
&c.	&c.

CHAPTER IV.

THE CONJUGATIONS.

425 Differences of conjugation due to variety in the forms of the present tense. 426 The Sanscrit conjugations, doubly classified. 427 Grimm's arrangement of the Teutonic conjugations. 428 Analogy between the German strong verbs and the principal Sanscrit conjugation. 429 Greek conjugations. Objections to the ordinary arrangement. 430 True classification of Greek verbs. 431 I. *Primitive verbs*. (1) Reduplication. 432 (2) Addition of *ya*. 433 (3) Insertion of *τ-* or *ν-*. Case of *διοπρέω*. 434 (4) Forms in *θ-* and *-σν*. 435 (5) *Guna*. 436 II. *Derivative verbs*. Their terminations. 437 Verbs derived from compound adjectives. 438 Affections of the root-vowel. 439 (1) The vowel permanent. 440 (2) Alteration of quality. 441 (3) Alteration of quantity. 442 (4) *Guna*. 443 The simple aorist as a conjugational variety.

425 **T**HE differences in the verbs of the Indo-Germanic family, which have induced grammarians to divide them into classes called conjugations, are produced entirely by the various methods that have been adopted to give greater strength to the root in the present tense and those dependent upon it. The necessity for this addition to the root has arisen in the wish to create an expression of duration, which, as we have before remarked, is often effected by reduplication only. Other methods of expressing it were brought forward under the head of vocalization (§ 223): as, however, the subject of the Greek conjugations has never been properly treated, we may venture in this place to resume the question at greater length. It will perhaps conduce to the better understanding of the nature of those changes on which differences of conjugation depend, if we begin by a brief survey of the Sanscrit and German systems.

426 The Indian grammarians divide their verbal roots into 10 classes or conjugations. They reckon the whole number of roots at 2352, to which they add 44 *Sautra* roots, or those which are taken into the *Sūtrāni* or grammatical rules for the purpose of deriving some few nouns which cannot be traced back to any of the regular verbal roots. The number of the distinct roots in actual use is much less than that which the grammarians give; indeed not above 500 are found in the existing Sanscrit writings. The distinctions of the 10 conjugation classes, which with the exception of the 9th class do not extend beyond the present (indicative, imperative, and optative) and imperfect (indicative), are of two kinds, first, vowel-changes, *guna* or

anusvâra; secondly, pronominal additions, *na*, *nu*, or *ya*. We shall, therefore, give two classifications of the 10 conjugations; first, according as they have pronominal additions or not; secondly, as they have *guna* or *anusvâra*.

A. I. No pronominal addition.

α . Person-endings joined immediately to the root.

{ 2nd class, 70 roots; as *pâ-mi*, "I rule."
 { 3rd 20 roots—reduplication, as *da-dâ-mi*, "I give."
 { 7th 24 roots—*anusvâra*, as *bhi-na-d-mi*, "I split,"
 (*findo*).

β . Person-endings joined to the root by the vowel α .

{ 1st class, 1000 roots—*guna* of root vowel, as *bôdhâmi*
 (from *budh*), "I know."
 { 6th 130 roots—simple root, as *tudâmi* (from *tud*).

II. Pronominal addition.

α . *ya* added to the root.

{ 4th class, 130 roots—mostly neuter verbs, as *naç-yâ-mi*,
 "I perish."
 { 10th *guna*; mostly causals and derivatives, as *mâna-*
yâ-mi, "I honour*."

β . *nu* added to the root.

{ 5th class, 30 roots; *guno* of suffix, as *âp-nô-mi*, "I ob-
 tain."
 { 8th 10 roots; all except *krî*, "to make," ending in
n or *ñ*, probably adscititious in the other 9
 roots, as *ta-nô-mi*.

γ . *na* added to the root.

9th class—*guna* of suffix, which becomes *nî* before the heavy endings, as *mṛd*; *mṛd-nâ-mi*, *mṛd-nî-mas*.

B. α . Both vowels *guna'd*.

1st and 10th classes, *budha*, *bôdhâmi*; *churi*, *chôrayâmi*.

β . First vowel *guna'd*.

2nd and 3rd classes, *dvi*, *dvêshmi*; *da*, *dadâ-mi*.

* The value of the distinction of vowels in Greek is shown, as well in other formations, as in the fact that the Sanscrit *-ayâmi* includes the three classes of vowel-verbs in *-áω*, *-éω*, and *-óω*.

γ. Second vowel *guna'd*.

4th, 5th, 6th, 8th, 9th classes, *çuch-yâ-mi*; *âpnômi*; *tudâ-mi*; *tanômi*; *mṛdnâmi*.

δ. *anusvâra*.

7th class, *yuj*, *yunaḥmi* (*jungo*).

427 Grimm divides the verb in all the German dialects into two great classes or conjugations distinguished by the form of the preterite. The first he calls the strong conjugation; it forms the preterite from the root without the addition of any foreign element. The second he terms the weak conjugation; it forms its preterite by the insertion of the lingual *d* (in old High German *t*) between the root and person-ending. Now it appears that the strong form is the original one in all the German dialects: for all derivative verbs are conjugated according to the weak form; the roots which form the basis of the language are confined to the strong verbs; and though a strong verb may in the course of time degenerate into a weak one, the converse never takes place. Therefore, for the purpose of comparison, we may safely leave alone the weak form of conjugation. The strong verbs are divided into two classes, each consisting of six conjugations; the first of these leading subdivisions contains the verbs with reduplicated preterites, the second, those in which the perfect is formed by vocalization only. Two of the reduplicated conjugations (the 5th and 6th) adopt both methods of forming the preterite; and as the vowel is the same in the singular and plural preterite of the 7th conjugation, and as verbs vacillate between this and the reduplicated conjugation, Grimm concludes (i. p. 838) that the 7th must be supposed to have been originally reduplicative with a change of vowel like the 5th and 6th. Grimm (i. p. 840) takes the following instances among others, from the Gothic language; he gives the first singular present indicative; preterite indicative singular; preterite indicative plural; and the participle.

Reduplicated conjugation.

- I. *Salta* (*salio*); *sâi-salt*, *sâi-saltum*; *saltans*.
- II. *Haita* (*voco*); *hâi-hâit*, *hâi-hâitum*; *hâitans*.
- III. *Hlâupa* (*curro*); *hlâi-hlâup* (?), *hlâi-hlâupum*; *hlâupans*.
- IV. *Slêpa* (*dormio*); *sâi-zlêp*, *sâi-zlêpum*; *slêpans*.

Reduplicated with change of vowel.

- V. *Lâia* (*irrideo*); *lâi-lô*, *lâi-lôum*; *lâians*.
- VI. *Grêta* (*ploro*); *gâi-grôt*, *gâi-grôtum*; *grêtans*.

Change of vowel without reduplication.

- VII. *Fara* (*proficiscor*); *fôr*, *fôrum*; *farans*.
- VIII. *Greipa* (*rapio*); *grâip*, *gripum*; *gripans*.
- IX. *Kiusa* (*eligo*); *kâus*, *kusum*; *kusans*.
- X. *Giba* (*do*); *gab*, *gêbum*; *gibans*.
- XI. *Nima* (*sumo*); *nam*, *nênum*; *numans*.
- XII. *Hilpa* (*adjuvo*); *halp*, *hulpum*; *hulpans**.

428 These strong conjugations include 80 English verbs; the second conjugation, however, has no representative in our language, and all our verbs have lost the reduplication. All the primitive verbs in the other Teutonic dialects are also formed according to the strong Gothic inflexion. Now if we examine this form of conjugation, which comprises 130 verbs out of the scanty remains of Gothic literature, we shall find that it agrees with the first Sanscrit conjugation, which contains nearly half of the Sanscrit verbal roots. Some few verbs present traces of the fourth Sanscrit conjugation; for instance, in the seventh Gothic conjugation, we have *vahs-ja* (*cresco*), *vash-ji-th* (*crescit*); preterite *vôhs*, *vôhsum*; participle *vahsans*, corresponding to the old High German and old Saxon *wahsu*, middle High German *wahse*, Anglo-Saxon *vëaxe*, English *wax*. The general analogy between the German strong verbs and the principal Sanscrit conjugation was first pointed out by Bopp (*Vergl. Gramm.* p. 115). There is, however, a remarkable difference between the strong German verbs and the first Sanscrit conjugation, which Bopp has not noticed; namely, that in the first Sanscrit conjugation, the connecting vowel is almost always *guna*'d in the first person of the pres., imperf., and 1st pret., as well as the root-vowel, whereas, in the German, the connecting vowel never admits of any quantitative modification. There is yet another point which we must not overlook, if we would make a profitable comparison between the German and Sanscrit verb. We have seen that the Sanscrit verb has *guna* as well as reduplication, so that it agrees with the fifth and sixth strong conjugations of the German verb. But when the verb-root consists of a short *a*, between two single consonants, only the first and third persons singular of the preterite are reduplicated, all the other persons being distinguished by a substitution of the diphthong *ê* = *ai* for the long *â*, and the first syllable being thrown off. Thus from the root *tan* we have preterite first and third person singular *tatâna*, se-

* The English reader will find the law according to which Grimm has arranged the last six conjugations, very well stated in a paper in the *Philological Museum* (Vol. II. pp. 375 foll.). The scheme of the vowels in all the conjugations in Gothic and old High German is given by Grimm, *Deutsch. Gramm.* I. 837.

cond singular *tênitha*, dual *têniva*, *tênathus*, *tênatus*, plural *tênima*, *têna*, *tênus*. Bopp thinks this *i* has arisen from assimilation of the connecting vowels (*Krit. Gramm. der Sanskr. Spr.* p. 224, comp. *Vergl. Gramm.* pp. 40, 64). We do not see how this can be the case, for in the second and third dual, at all events, the connecting vowel is not *i* but *a*. We rather look upon it as a substitution for the reduplication, of the same kind with that which takes place so commonly in Latin, where reduplication is so seldom found: thus, we have *căpio*, *cēpi*; *vēnio*, *vēni*, &c. That these are substitutions for a lost reduplication, may be inferred from a comparison of *pepīgi* with *compēgi*, of *fāgi* with *πέφηνα*, &c. With regard to the distinction of the first and third singular in the Sanscrit preterite from the other persons, Grimm has aptly compared the old High German and Anglo-Saxon singular, I. *las*, II. *lāsi*, III. *las*; plural, I. *lāsumés*, II. *lāsut*, III. *lāsun* (*Deutsche Gramm.* I. p. 1056). From this we infer that the last six of the German strong conjugations were either originally reduplicated like the first six, or that the strengthening of the vowel is to be considered as perfectly identical with reduplication, as we shall see it is in Greek.

429 In the old Greek grammars (e. g. Dionys. Thr. *Bekker. Anecd.* p. 638) the conjugations of the verbs are divided into three classes, which are given in the following order; (1) those of the *barytone* verbs, or of those which never admit an accent on the ending of the present; (2) those of the contracted verbs in *-έω*, *-άω*, and *-όω*; and (3) those of the verbs in *-μι*. This classification is not scientific, and cannot be recognised by the comparative philologist. We have before shown that all verbs originally agreed in their person-endings with those in *-μι*, as well from other reasons, as from the fact that those which are still so conjugated express the most elementary notions, and, therefore, must be considered as the oldest verbs. It is true that the Greek verbs in *-μι* are distinguished from the other verbs by certain peculiarities, but they should be classed according to these peculiarities, and not be discriminated from the rest of the verbs merely because they have their person-endings preserved in a more primitive form. For the practical convenience of the learner the best arrangement of the Greek conjugations is that which recognises two classes of verbs, A. Primary Verbs in *-μι*, and B. Secondary Verbs in *-ω*; and which subdivides class B., according to the root or characteristic letters, into (a) consonantal or semi-consonantal verbs; and (b) vowel-verbs, which admit of contraction (see *Greek Grammar*, Art. 299). But comparative philology, having regard to the origination of the forms themselves, demands a classification corresponding to that which is adopted in the Sanscrit and Teutonic grammars: namely, according

to the different modes of strengthening the form of the present and other principal tenses*. We cannot indeed divide the Greek conjugations into *strong* and *weak* forms, in the same way as the Gothic: for, in the first place, all Greek verbs form the preterite by reduplications, whereas this is confined to the strong form in Gothic: and, conversely, all verbs form certain tenses by the addition of a foreign element, which is the indication of the weak form in Gothic. We may however say, that, in case the lengthened form of the present is a consequence of its being a derivative or secondary verb, it cannot form any of its tenses by an alteration of the quality or quantity of the root-vowel, but must have recourse either to reduplication, addition, or both; and in this way it may be said that derivative or secondary verbs in Greek are weaker forms.

430. One of the great mistakes which grammarians have committed in this department is, that they have considered the present tense of *barytone* verbs as the primitive form of the root, and the other tenses as derived from it. The consequence of this has been to load our dictionaries and lists of defective verbs with an infinitude of so-called obsolete forms, from which, forsooth, these tenses were derived. The fact is, that the present tense of a barytone verb always shows the root under some modification or increase, the genuine root being in most cases preserved in the so-called second aorist. We proceed to classify the verbs according to the various methods by which this corroboration of the present is effected. And let us take (I) the primitive verbs, i. e. those which are not derived from nouns or which do not exhibit the root in any more simple form; (II) the derivative verbs, i. e. those which are formed from nouns or from the other class of verbs.

431 I. (1) In the simplest and apparently the oldest modification, the root is immediately connected with the ending, the vowel

* The most recent treatise on the Indo-Germanic verb is that of Professor Moriz Rapp of Tübingen (*Der Verbal-Organismus der indisch-europäischen Sprachen*, Stuttgart und Augsburg, 1859, three volumes). This work, which does not seem to have any original or independent value, is merely a sort of collectanea in aid of the author's lectures. His theory of the Greek verb in particular is professedly based on the grammatical systems of Buttman and Bopp. His enthusiastic appreciation of Buttman (Vol. II, p. 4) is quite in accordance with what we said long ago (above, p. 64). With regard to the conjugations of the Greek verb, he is content to adopt three main classes, (1) those which have no formative adjunct; (2) those which have a formative vowel; (3) those which have a formative consonant. But he does not exhibit much analytical power, and frequently confuses when he professes to distinguish.

being generally *guna'd*, and the initial consonant reduplicated, when the root begins with a consonant. To this form belong the first three conjugations of the verbs in *-μι*. There are cases in which we find reduplication without *guna*, as in *πίπτω* for *πι-πέτω*; in others *guna* without reduplication, as in *φημί*; in others the roots are joined to the ending without any change, as in *εἰ-μί* = *ἔσ-μί*; and in some we find *anuscára* of the reduplication, as in *πί-μ-πλημι*. All these verbs may be compared with the second and third Sanscrit conjugations.

432 (2) A very large class adds to the root the pronominal syllable (second element) *ια* = Sanscrit *ya*. These correspond, therefore, to the fourth and tenth Sanscrit conjugations. In Greek, however, the addition is absorbed, and represented only by a variety of assimilations, as is often the case when the same syllable is used for the purpose of forming a comparative degree. The following are the transformations under which this adjunct appears in the verb-conjugation.

α. When the verb-root ends in a liquid, the *ι* is frequently placed before the liquid, by virtue of the fact, before mentioned, that the liquid sounds its adjacent vowel indifferently before or after; thus from the crude-form *σπα-ρι-* we have *σπείρω* for *σπάργαμι*; from *φαν-*, *φαίνω* for *φάνγαμι*, &c. Or the liquid is doubled; thus from *ψα-λι-* we have *ψάλλω* for *ψάλλαμι*, like *ἄλλος* for *ἄλιος*, &c., and from *κα-ρ-* we have both *κέρδω* and *κείρω*, from *φθα-ρ-* both *φθέρδω* and *φθείρω*, and so forth. Or a short *ι* in the root coalesces with the *ι* of the adjunct and becomes long; thus from *κρί-* we have *κρίνω* = *κρίνγαμι*.

β. When the root ends in *γ*, *κ*, *χ*, or in *δ*, *τ*, *θ*, this pronominal adjunct is represented, as when it appears under the same circumstances in comparatives, by *ξ*, *σσ*, or *ττ*, of which we conclude that *ξ* is always the primitive change (above, § 216).

γ. The adjunct *ya* also appears to be contained in most of the verbs in *-έω*, *-άω*. With regard to the latter, which often occur as verbs in *-η-μι*, little need be said, as we have already shown in more than one instance that the sound *ya* is included in *η*. We have also had examples of the substitution of *ε* for *γ* in the middle of a word: that this is its use in the case of the verbs in *-έω* appears from the Boeotian forms *ἀγωνοθετίοντος*, *εἰλαρχιόντων*, *διοπροπίοντος*, *χοραγίοντες*, &c.; for *ἀγωνοθετιγοντος*, or in common Greek *ἀγωνοθετοῦντος*, &c. (Böckh, *Corpus Inscript.* i. p. 720). There are some verbs in

-άω, -έω, which must not be considered as containing the adjunct *γα*: such are δρά-ω = δρά-*FW*, which must be connected with δραπ- = δραπ- (cf. δραπέτης); καλέω = καλέ-*FW* connected with κλέφος, κλύω, &c.; cf. ξέω, ξύω, ξίφος, &c.; βρύω, βρέφος, &c.

433 (3) Another pronominal adjunct is the element *τ* or *ν*, which, we have seen, are identical, the former being added to roots ending in *β*, *π*, *φ*, or *κ*, the first and third of which are, of course, in this combination, changed to *π*, and the liquid *ν* being adopted for roots which end with the liquid *μ*, or with the dental *τ*. We sometimes also find *ν* after *-κ*. Thus from the roots κρνκ-, τυπ-, φαφ-, and τεκ-, we have κρύπ-*τ-ω*, τύπ-*τ-ω*, φάπ-*τ-ω*, τίκ-*τ-ω*; ταμ-, πετ-, and δακ-, make τέμ-*ν-ω*, πít-*ν-ω*, and δάκ-*ν-ω*. This *ν* is also added to vowel-roots, as in πít-*ν-ω*. It appears also under the longer form *νη*, as in the 9th Sanscrit conjugation, in δάμ-*νη-μι*, &c.; under the form *νν*, as in the 5th Sanscrit conjugation, in ξεύγ-*νν-μι* (root ξυγ-, already strengthened by *guna*), &c., and in this form the *ν* is often doubled, as in σβέ-*ν-νν-μι*, χρώ-*ν-νν-μι*, σκεδά-*ν-νν-μι* (above, § 220), and sometimes under the ordinary short form it is added to a root already strengthened by *anusvāra*, as in λα-μ-βά-*ν-ω*, root λαβ-, κι-γ-χά-*ν-ω* (also written κιχάνω), root κιχ-, λι-μ-πάνω (also written with a simple *guna*, as λείπω), root λιπ-. The change from ικάνω to ικ-νέ-ομαι is in accordance with the general principle with regard to liquids, already so often mentioned.

There is one verb, with regard to which it may seem doubtful whether there is an insertion of this *τ*- or not. We allude to the Attic διοπτρεύω, in the signification "to be the δίοπος, or supercargo of a ship"—"one who sailed in her as manager," also called the ἐπίλωνς. The following are the passages in the grammarians referring to it. Harpocration: διοπτρεύων, Δημοσθένης ἐν τῷ εἰς τὴν Λακρίτον. δίοπος λέγεται νεὼς ὁ διέπων καὶ ἐποπτεύων τὰ κατὰ τὴν ναῦν, ὁ καὶ ἡμᾶς λεγόμενος ἐπίπλους. Hesychius: δίοποι. ἐπιμεληταί.—ἂ δίοπον. ἀναρχον καὶ ἀφύλακτον. Αἰσχύλος, Φρύξεν. δίοποι γὰρ οἱ τῆς νεὼς φύλακες. Ælius Dionysius: δίοπος ὁ ναυφύλαξ ὡς ἐπισκοπῶν αὐτὴν καὶ ἐφορῶν ἀπὸ τοῦ ὀπτω. Erotianus: δίοπων, τῷ τῆς νηὸς ἐπιμελητῇ. παρὰ τὸ διοπτρεύειν. Ἀττικὴ δὲ ἡ λέξις κειμένη καὶ παρ' Ἀριστοφάνει ἐν Ἀττικάϊς λέξεσι καὶ παρ' Αἰσχύλῳ ἐν Σισύφῳ καὶ Εὐριπίδῃ ἐν Ἰππολύτῳ. It is quite clear that the connexion of δίοπος with ὀπτομαι is merely a fancy of the grammarians. As a political term δίοπος is naturally and immediately referred to διέπω, the use of which is quite in accordance with that of its derivative. Thus, as we have βασιλῆς δίοποι of two generals in Æschylus (*Pers.* 44); we have also in the same play (v. 108) πολέμους

πυργοδαίκτους διέπειν; and Pindar (according to Strabo, p. 544 B),
φησὶν ὅτι αἱ Ἀμάζονες,

Σύριον εὐρναίχμαν διεῖπον στρατόν.

Now there is, no doubt, a word διόπτῃς or διοπτήρ, which is connected with ὄπτομαι, and means "a spy," as in Homer, *Iliad*. x. 582:

τόν ῥα διοπτῆρα στρατοῦ ἔμμεναι ἡμετέροιο
Ἔκτωρ τε προέηκε καὶ ἄλλοι Τρῶες ἀγανοί—

where διοπτήρ στρατοῦ is a very different person from ὁ δίοπος στρατοῦ, and from this διόπτῃς we have a verb διοπτεύω, "to be a spy," as in Hom. *Iliad*. x. 451:

ἦ τε καὶ ὕστερον εἶσθα θοὰς ἐπὶ νῆας Ἀχαιῶν,
ἦὲ διοπτεύσων, ἦ ἐναντίβιον πολεμίζων.

In Sophocl. *Ajax*, 307, καὶ πλῆρες ἄτης ὥς διοπτεῖ στέργος, it means simply "to perceive," just as we use the verb "to espy." There would, therefore, be some ambiguity if διοπτεύω were also formed from δίοπος. And as διοπτεύων in Demosthen. *Lacrit.* p. 929, Ἰππίας Ἀθηναῖον Ἀλικαρνασσεὺς μαρτυρεῖ συμπλεῖν ἐν τῇ Ἰβλησίῳ νηὶ διοπτεύων τὴν ναὺν, does appear to be connected with δίοπος and not with διόπτῃς, it would be better, we think, to suppose that the τ has got in, in consequence of the false etymology which the grammarians have adopted, and therefore to read διοπεύων.

434 (4) The two pronominal insertions -θ- and -σκ-, which we have seen performing such important functions in the tenses and voices of the verb, also appear as corroborants of the present tense, though generally with a distinct meaning; thus from the root εδ- we have ἐσ-θί-ω, from φα-, φά-σκω, &c. These additions often affect the final consonant of the root, as in πάσχω from παθ-—πενθ-, the κ being aspirated and the θ lost in the similar sound of the σ; so also we have δίσκος from δικ-; and the word ἔσκε (*Odyss.* xix. 203, xxii. 31), which clearly means "he said" (Buttmann, *Lexil.* ii. p. 83), is to be considered as a similar contraction from *ἔλπ-σκε*—*ἐλπεσκε*, the root being *ἔεπ-*, Sanscrit *vach*, Latin *voc-*: a converse contraction has taken place in *ἐνεσπον* for *ἐνεπ-σκον*: ἔσχειν, σχεῖν, from *ἔχεσκον* are more analogous to πάσχω (see above, § 219).

435 (5) The remaining method of strengthening the present indicative is by simple *guna*, which, as we have seen, consists in placing ε before the root-vowel. This method is only applicable to those verbs in which the root-vowel is ι or υ: instances are, however, sufficiently numerous; thus, from the root στιβ- we have στείβω; from φυγ-, φεύγω; from λιπ-, λείπω; from λιχ-, λείχω; from πιθ-, πείθω; from

τυχ-, τεύχομαι, also, with *anuvāra* and *v*- adjunct, τυ-γ-χά-νω; from λιβ-, λείκω; from πυθ-, πεύθομαι, &c.

436 II. The derivative verbs are formed from their primitives by the addition of elements, some of which are used also for the mere purpose of strengthening the present tense in the primitives, from which, however, they are distinguished by the way in which these endings are joined to the crude-form, and by their possessing only those of the secondary tenses which can be constructed by extrinsic addition, namely, the first aorist active and passive and the perfect active in -κα. The terminations are -έ-ω, -ά-ω, -ό-ω, -ά-ζω, -ί-ζω, -ί-σκω, -λλω=λλω, -εύ-ω, -αί-νω, -ύ-νω; as φιλ-έ-ω from φίλο-ς, τιμ-ά-ω from τιμή, μισ-θό-ω from μίσθο-ς, σκευ-ά-ζω from σκευή, νομ-ί-ζω from νόμο-ς, γαμ-ί-σκω from γάμο-ς, ψά-λλω from ψάω, παιδ-εύ-ω from παῖς (παῖδ-ς), σημ-αί-νω from σῆμα=σήμειν, εὐθ-ύ-νω from εὐθύς; the terminations -έ-θω, -ύθω, seem to be appropriated to derivatives from simple verbs, for instance φλεγ-έ-θω from φλέγω, φθιν-ύ-θω from φθίνω: the *v* in the latter case is due to the *vv*, which seems to be added to the root φθι-, to form the present tense. The terminations -ι-σκ-, -υ-σκ-, are inserted between the root and the strengthening pronominal adjunct *v*- in the verbs ὀφλ-ι-σκ-άνω, ἄλ-υ-σκ-ά-νω, ἀμβλι-σκ-ά-νω. It is obvious that these terminations are of pronominal origin, and we have already discussed most of them. The derivative verbs themselves are, for the most part, either causative, inchoative, or denominative, and they obtain these meanings from pronominal affections of the primitive forms, which seem to be strictly analogous to the case-endings of the noun: for example, we cannot overlook the resemblance between -aya, which forms the Sanscrit causative verb, and the same syllables, which mark the dative case in that language (§ 231). In Greek it is clear that the denominative verbs in -ζω=-δγα-μι are built on the foundation of the genuine ablative case, which gives rise also to the analogous patronymics in -δης, and to the adjectives in -διος (§ 247): and we are justified in considering the verbs in -έω, -άω, -όω, -εύω, as similarly formed from the shortened genitive, like the corresponding adjectives: cf. χρυσός, gen. χρυσοῖο with χρύσεος and χρυσόω (above, § 298). By the side of verbs in -λλω and -σκω we have diminutives in -λος and -σκος; thus βάλλω=βα-λίω, "to cause to go away," may be compared with θρούλλος from θροός, and ἡβά-σκω is analogous to παιδί-σκη. We have already (p. 457) adverted to the connexion of such words as ποιμήν, &c. with the corresponding verbs ποιμαίνω, &c. It very often happens, as in the case of σῆμα=σήμειν- and σημαίνω, εὐθύ=εὐθύ-τ and εὐθύνω, that the noun of agency is no longer extant under the simple form in

-ν, but has to be reproduced under some longer form, such as *σημαίν-τωρ*, *εὐθύν-τήρ*; but this will not prevent us from perceiving that the full form of *ματ-* is *μεν-τ*, and that we have in the verb, as well as in the noun, that combination of the first and third elements under the form *μ+ν*, which expresses the action as proceeding from the subject, and with especial reference to its results (§ 256). When the objective ν or τ appears alone it is difficult to say what precise relation is implied, though we know from the parallel case of the nouns that there must be some reference to a special objectivity (§ 255). When we pass from *ξέφω* to *ξίφος*, and from *ξύω* to *ξύ-λον*, we see the instrument in its objective expression, and we cannot mistake the same fact as manifested in *ξαίνω* and *ξανθός*, by the side of *ξουθός* and *ξεστός*.

The common verb *αἰνέω* merits particular consideration, even after what Buttmann has written about it (*Lexil.* II. pp. 112 foll.). There can be no doubt that the simplest form of the verb was *αἶνω*, as Hesychius tells us: *αἶνων. βαρυτόνωσ, ἐπαινῶν τι*. From this was formed the substantive *αἶνος*, and from it the derivative verb *αἰνέ-ω*, and the derivative noun *αἶνη*=*αἶνυα* (Herodot. III. 74). The primary signification of *αἶνω* is "to say" or "declare," and the meaning of *αἶνος* in Homer is "a speech" or "narrative." From this came the sense of "praise," "commendation," just as the Latin *laudare* is connected with *laut*, *loud*. That the verb is formed with the pronominal suffix ν-, and that its root is αι-, is proved by the comparison of *αἶνω* with *αἶο*, and of *αἶ-σα* with *fa-tum*, which Buttmann has suggested. We also recognise the root in *ἤμι*, "I say," and in the Sanscrit *āha*, "I said." In these last two forms the guttural semi-vowel is absorbed; it is transposed in αι-, according to the rule, and perhaps represents the digamma, the labial element of which appears in *φη-μί*, for, according to Thiersch, *αἶνη* is a digammated word. As the derivative *αἰνέω* bears the secondary sense of "to praise," "to extol," we might, perhaps, change the accent, and read *αἶνω*, *αἶνεις*, in those passages of Æschylus where the general and primary meaning is conveyed: thus, in the *Agamemnon*, 98, we read

τούτων λέξασ' [I. λέξον θ'] ὅτι καὶ δυνατόν
καὶ θεῖμς αἰνεῖν,

"of these things declare, as much as it is possible and right to mention." And in the same play, 1460, we have

ἧ μέγαν οἴκοις τοῖσδε
δαίμονα καὶ βαρύνηνιν αἰνεῖς.
φεῦ, φεῦ! κακὸν αἶνον ἀτη-
ρᾶς τύχας ἀκορέστου.

i. e. "you mention a divinity who has exerted great influence upon

this family, and has manifested his heavy indignation against it—an ill-boding mention of misfortunes ever new” (for the force of ἀκόρεστος see above, p. 554); and in the *Choëph.* 1000, we have

φόνου δὲ κηκίς ξὺν χρόνῳ ξυμβάλλεται,
πολλὰς βαρὰς φθείρουσα τοῦ ποικίλλματος—
νῦν αὐτὸν (scil. τὸν φόνον) αἰνῶ, νῦν ἀποιμῶζω παρῶν,
πατροκτόνον θ’ ὕφασμα προσφρωνῶν τόδε.

437 In the case of primitive words the terminations are joined immediately to some root, even though the contact may absorb the final consonant of the root, but in these derivatives the endings are always affixed to some crude-form, and therefore, of necessity, a vowel is inserted between the root and the termination. This enables us to explain, why verbs, including a noun, or the ἀ- privative, or δυς-, or εὔ-, and a verbal root, are generally formed in -έ-ω. The fact is, that while such verbs as ἀπο-δίδωμι, συν-τρέχειν, παρα-λαμβάνειν, &c., are strictly separable compounds, as is shown by the frequent tmesis in the older writers, all compound nouns, whether made up of prepositions, or of nouns, or of ἀ-, δυς-, or εὔ-, and verbal roots, are actually melted down into individual words incapable of divulsion, and it is from these compound nouns that the verbs in question are formed; therefore they are derivative verbs, and the length of the word would generally induce a necessity for the shortest kind of derivation, which is in -έ-ω. If a Greek had wished to express the idea of conferring a benefit on any one, or of co-operating with him in a particular action, he would say εὔ ποιεῖν, συν-έρδειν, but if he wished to express habitual benefaction or habitual co-operation, he would take the compound nouns εὐ-εργέτη-ς and σύν-εργο-ς and make derivative verbs from them—εὐ-εργετ-έ-ω, “to be a benefactor,” and συν-εργ-έ-ω, “to be a co-operator.” It will be observed that we have precisely the same phenomenon in Latin: from *facere*, an uncontracted verb, we have the compound noun *lati-ficus*, and from this the derivative or contract verb *lati-ficâre*; from *gerere* we have *belli-ger*, and from this *belli-gerâre*. With regard to the Greek verbs it seems very strange that even modern scholars should talk of deriving them from the second perfect of the barytone verbs, the roots of which they contain (see Erfurdt *ad Soph.* Antig. 56; Lobeck *ad Phrynich.* p. 580), especially after Scaliger had, with his usual penetration, discovered the truth. *Nemo Hellenismi paullo peritior*, says that great scholar (*Phrynich.* p. 266 Lobeck), *concedet, εὐαγγέλλω græcum esse. Nam τὸ εὔ καὶ τὰ στερητικὰ μόρια non componuntur cum verbis, sed cum nominibus. Itaque εὐάγγελος recte dicitur, unde verbum εὐαγγελέω, non εὐαγγέλλω*

quod est absurdissimum *. But although in general the weight of the compound nouns recommended the shortest form of derivation for the verb, there is no absolute reason why one of the other derivative forms should not be occasionally adopted, when there was any particular reason for the preference. Such a reason seems to exist for the assumption of ἀτιμάζω instead of ἀτιμέω; for, τιμάω being itself a derivative, a similar derivative would hardly point to the distinction of τιμή and ἄτιμος. The word ἀτίει which occurs in Theognis (621) is justified by the opposition to τίει:

παῖς τις πλούσιον ἄνδρα τίει, ἀτίει δὲ πενιχρόν.

The word χερνίπτεσθαι is probably derived from χέρνιψ considered as a simple word, like χαλέπτω from χαλεπός (Buttmann, *Ausführl. Sprl.* § 121); δυσθνήσκων, which occurs twice in Euripides (*Rhes.* 791; *Electr.* 843), is used only as an epithet or adjective, and might be explained by the metrical impracticability of the legitimate δυσθανατέω, though if it had been in one of the other dramatists (see Müller, *Hist. Lit. Gr.* i. p. 483), we should have expected any form,—δυσθνήν-τέω for example,—rather than such a violation of all analogy; and in the *Herc. Fur.* 863, it is clear that σταδιοδραμοῦμαι is a false reading, probably due to the gloss στάδια δραμοῦμαι which is found in Flor. 2, and we ought to restore the genuine σταδιοδρομήσω of which these words are an explanation (see Lobeck, *Phryn.* p. 617): for σταδιοδρομέω actually occurs, and it is not unlikely that an ignorant copyist, knowing by habit that δραμοῦμαι was the future of τρέχω, has barbarized the word into the form in which it appears. Some of the

* The necessity for some “contributions towards a more accurate knowledge of the Greek Language” in this country was signally proved in the last months of 1857, by a controversy waged in the “Times” and other newspapers as to the validity of the form τηλεγραμμα. It is believed that no doubt on the subject was entertained by any really good scholar, but graduates of Oxford and Cambridge, laying claim to academical distinctions, strenuously asserted in print that the barytone τηλεγράφω would have been an allowable form! The analogy of χειρογράφω, τηλεβολέω, &c. shows what the form would have been, and the two synonymous nouns χειρόγραφον and χειρογράφημα prove that the telegraphic message might be expressed by either τηλεγράφον or τηλεγράφημα; and while τηλεβόλος in the classical writers is generally used as an epithet of the missile discharged from afar (Pind. *Pyth.* iii. 49: τηλεβόλῳ χειρμαδι. Mnasalcas, *Anth. Pal.* 6, 125, 3: τηλεβόλος ἴος), it sometimes means the instrument, as in *Anth. Pal.* Appendix, ix. 97, we have τηλεβόλου ὀντίρα of an archer; and the medieval Greeks had no better name for the cannon and the gun than τηλεβόλος and its diminutive τηλεβόλισκος (Laonicus Chalcondyles, p. 72 ed. Bekker). So that τηλεγράφος might signify the instrument or machine, while τηλεγράφον or τηλεγράφημα would denote the message.

other instances in which this rule seems to be violated have been successfully corrected by modern scholars.

438 Having now shown by what increments of addition or insertion the present may be strengthened, we proceed to point out the relation which subsists between the root-vowel and that which appears as its *locum tenens* in the present tense. This subject has been already touched on in the chapter on the roots: it will, therefore, be sufficient in this place to give instances of the change of vowel in the Greek verb according to an arrangement first pointed out by Pott (*Etymol. Forsch.* i. pp. 11 foll.). This scholar has divided the Greek verb into four classes according to the affections of the root-vowel in the leading tenses; (1) the root preserves the same vowel throughout all the inflexions; (2) the quality of the vowel is altered; (3) its quantity is altered, generally by doubling; (4) it is *guna'd*. The second aorist active, middle and passive, generally exhibits the root, and the principal changes are those of the second perfect, or noun containing the verbal root which agrees with the second perfect, and the present. The reason for the change of vowel in (2), (3), (4) is, as we have seen, the greater weight of the perfect and present in consequence of the methods adopted for strengthening them. The present is generally a heavier form than the perfect or derivative noun, and, therefore, has the lighter vowel. It will be observed that there are some verbs, placed by Pott in the 3rd class, which are examples of *guna'*: to prevent mistakes we have always stated the method of corroboration adopted in the particular case.

439 (1) This class is very numerous, as it contains all the weak or derivative verbs, many of which have already received a vowel modification in their crude-form. Thus from the root *πεν-* we have *πόνος* and from this *πονέω*, in which the first vowel remains unaltered through all tenses. The most obvious instance of the primitive verbs of this class is second aorist *ἔτυπον*, second perfect *τέτυπας*, verbal substantive *κτύπος*, present *τύπτω*.

440 (2) In this class are included verbs with a primitive *α* (or *ᾱ* = *r* Sanscrit) changed into *ο* and *ε* in the strong tenses. It agrees with the 11th and 12th of the strong German conjugations, in which the root-vowel is followed by a liquid, or a mute and liquid, or preceded by a liquid (conj. 11), or followed by a liquid and mute, or a double liquid (conj. 12). This class is separated by Pott into four subdivisions, the second and third of which we consider identical.

A. Roots ending in a liquid.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἐ-στάλ-ην	στόλο-ς	στέλλω (adjunct ια)
ἐβαλ-ον	{ βε-βόλ-η-μαι } βολή	βάλλω (id.)
{ ἐ-ταμ-ον } { ταμ-ία-ς }	τόμο-ς	τέμ-ν-ω (adjunct ν)
καν-εῖν	κονή Hesych.	καίνω (adj. ια)
ἐ-πταρ-ον	πτόρο-ς	{ πτάρ-νυ-μαι (adj. νν) } { πταίρω (adj. ια) }
ἐ-φθάρ-ην	ἐ-φθορ-α	φθείρω (id.)
ἐ-σπάρ-ην	{ ἐσπορ-α } { σπορά }	σπείρω (id.)
ἐ-δάρ-ην	δορ-ά	δείρω (id.)
φαρέ-τρα	φόρος	φέρω (adj. absorbed).

B. Roots ending in liquid and mute; the liquid of course may shift its place.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἐ-δρακ-ον	δέ-δορκ-α	δέρκ-ο-μαι
ἐ-παρδ-ον	πέ-πορδ-α	πέρδ-ω
ἐ-πρᾶθ-ον	πτολί-πορθο-ς	πέρθ-ω
{ ἐ-τραπ-ό-μην }	{ τροφή }	{ τέρπω }
{ ἐ-τραπ-ον }	{ τέτροφ-α }	{ τρέπω }
ἐ-τραφ-ον	τέτροφα	τρέφω
ἐ-κλάπ-ην	κέ-κλοφ-α	κλέπ-τ-ω (adj. τ).

C. Roots without liquids.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
Sanscrit <i>had</i>	κέ-χοδ-α	χέξω (adj. ια)
ἐ-τεκ-ον	τέτοκα	τίκ-τ-ω (adj. τ-)
{ ἐ-πεσ-ον }	ποτ-μός-ς	{ πί-πτ-ω (redupl.) }
{ ἐ-πετ-ον }		{ πιτ-νέω (adj. νε) }
Sanscr. <i>pat</i>		
ἐ-ψέγ-ην	ψόγο-ς	ψέγω

441 (3) This class comprehends verbs having α for their root-vowel; this vowel is generally doubled or *guna'd* in the perfect and present, so that these verbs agree with the seventh strong German conjugation.

* Pott considers *τέρπω* and *τρέπω* as belonging to different classes; we think that they are the same word, and regard them as but slight modifications of *τρέφω*.

2nd Aorist.	2nd Perfect.	Present.
ἔ-κράγ-ον	κέ-κράγα (<i>guna</i>)	κράζω (adj. <i>ια</i>)
ἔ-κλαγ-ον	{ κέ-κληγα (<i>guna</i>) κέ-κλαγγα (<i>anusvāra</i>) }	κλάζω (adj. <i>ια</i>)
ἔ-πάγ-ην	πέ-πηγα (<i>guna</i>)	πήγ-νυμι (adj. <i>νυ</i>)
ἔ-λακ-ον	λέ-λακα (<i>guna</i>)	λάσκω (adj. <i>σκ</i>)
ἔ-τακ-ον	τέ-τηκα-α (<i>guna</i>)	τήκω (<i>guna</i>)
ἔ-λαχ-ον	εἴληχα (<i>guna</i>)	λαγχάνω (adj. <i>ν</i> , and <i>anusvāra</i>)
ἔ-λαβ-ον	εἴληφα (<i>guna</i> and affix)	λαμβάνω (adj. <i>ν</i> , and <i>anusvāra</i>)
ἔ-δακ-ον	δέδηχα (<i>guna</i> and affix)	δάκ-ν-ω (adj. <i>ν</i>)
ἔ-φράν-ην	πέφηνα (<i>guna</i>)	φαίνω (adj. <i>ια</i>)

Pott subjoins to this class a number of perfects such as *πέφροικα*, *ἔρῳιγα*, *βέβρωθα*, *τέτρωγα*, &c., aorists such as *ἔθιγον*, *κρίκε*, *δεκεῖν*, *ἔκικον*, &c., but they are, in our opinion, quite different. The *ν* in *πέπονθ-α* belongs to the root, which is *παθ-* = *πενθ-* (above, § 114).

442 (4) In the last class we find verbs which have *ι* or *υ* for their root-vowel, and this is *guna*'d in the present and perfect, the *guna*-vowel being generally changed according to the law observed in class 2. This class corresponds, therefore, to the eighth and ninth strong German conjugations.

2nd Aorist.	2nd Perfect or Verbal Noun.	Present.
ἔ-στιχ-ον	στοιχο-ς	στείχω
ἔ-λιπ-ον	λέλοιπα	λείπω
ἔ-στίβ-ην	στοιβή	στείβω
λιβά-δ-	λοιβή	λείβω
ἰδ-εῖν	οἶδα	εἶδω
ἔ-πιθ-ον	πέποιθα	πείθω
ἔ-φρυγ-ον	πέφρυγα	φεύγω
ἔ-ξύγ-ην	ξεῦγος	ξύγνυμι (adj. <i>νυ</i> , as well as <i>guna</i>)
ἔ-τυχ-ον	τέτευχα	{ τυγχάνω (adj. <i>ν</i> , and <i>anusvāra</i>) τεύχω (<i>guna</i>) }
ἔ-πυθ-ό-μην	πευθώ	{ πεύδομαι πυνθάνομαι (adj. <i>ν</i> , and <i>anusvāra</i>) }
Lat. <i>stūd-eo</i>	σπουδή	σπενδω
λυγ-ρό-ς	λευγ-α-λέ-ος	λύγω

443 In giving to the augmented tense, which presents the root of the verb in its simplest form, the name of second aorist, we acknowledge the difficulty of determining in every particular case, whether this tense is really a second aorist, correlative with the second future, and produced by an evanescence of the affix σ -, or whether it is a conjugational variety, that is, the imperfect of a semel-factive verb, which never had any affix. The unaffected form in which the root appears would lead to the latter conclusion, and, not to speak of the semel-factive tenses in the Semitic languages, the Slavonic languages give us different classes of verbs distinguished as semel-factive or monologous (in Polish *iednotliwé*) and frequentative or iterative (in Polish *czestotliwé*); so that this conjugational variety would not be without precedent. If we look through any list of so-called second aorists, in which the person-endings are joined immediately to the root without even the intervention of a short vowel, or any other fulcrum beyond *guna* (see Kuhn, *De Conjugatione in -mu*, p. 60; *Gr. Gr.* Art. 315, II.), we shall see that in most cases it is nearly impossible to say, whether the form is not due to some absorption or apocope of an affix. At any rate, it is clear that the shortest of these forms, and those too which we should most confidently refer to a conjugational variety, are identical in use with the regular aorist. This is shown in a striking manner by the fact, that in common verbs like $\tau\acute{\iota}\theta\eta\mu\iota$, $\acute{\iota}\eta\mu\iota$, $\delta\acute{\iota}\delta\omega\mu\iota$, &c., the first aorist ($\acute{\epsilon}\theta\eta\kappa\alpha$, $\acute{\eta}\kappa\alpha$, $\acute{\epsilon}\delta\omega\kappa\alpha$) is used only in the singular of the indicative mood, the shorter and apparently unaffected forms ($\acute{\epsilon}\theta\epsilon\mu\epsilon\nu$, $\acute{\epsilon}\acute{\iota}\mu\epsilon\nu$, $\acute{\epsilon}\delta\omicron\mu\epsilon\nu$) being substituted in the plural and dual indicative, and in the other moods and participles.

CHAPTER V.

THE USE OF AUXILIARY VERBS IN GREEK.

444 Auxiliaries are generally verbs expressive of will and choice. 445 Differences between the infinitive and participle in relation to the auxiliary. 446 Definition of an auxiliary verb. 447 Use of *σωκῶ*; 448 Of *ἐθέλω* and *μέλλω*. 449 Reasons for examining the Greek verbs which signify will or desire. 450 General enumeration of results. 451 *Λάω* signifies "to wish," "to take," and "to see." 452 Verbs derived from *λάω* bearing the last sense. 453 Verbs signifying "to take." 454 Proper meaning of *βλάπτω*. 455 *Λεία*, *λέων*, *λᾶς*, &c. Idea of selection implied in *λᾶς*. Ancient buildings of picked stones. 456 Derivations from *λάω* signifying "I wish." 457 Digression concerning *αἴγλη*. 458 Etymology of this word. 459 *Ἀγάλλω*, *ἄγλαος*, *γελᾶω*, &c. 460 Connection of "light" and "speech." 461 Other analogies: *ἄσελγής* and *σιγαλοεῖς*. 462 Etymology of *θέλω* compared with *θέναρ* and *θάλασσα*. 463 Distinction of *θέλω* and *βούλομαι*. 464 *ἔλιν*, *ἐλκειν*, and *τέλγειν*. 465 *Θέλεμος*. 466 Etymology of *βούλομαι*. 467 The forms *βουλήσονται*, *ἡβουλήθηρ*, &c. 468 The intensive prefix *βον-*. 469 *Βονός*, &c. 470 The earth and the cattle. 471 *Θυμός*: its Platonic use; 472 Its etymology. *Μάω*. *Θοάζω*. 473 *Θεός*, *θοός*, &c. 474 *Δεσπότης*. 475 *Δεσπόσιος* and *δεσποσιοναύτης*; explanation of a chorus [in *Æschylus*. 476 *Θύμος* and *θυμέλη*. 477 *Ὀργή*, *ὀέω*, &c. 478 *Ἀποδόση* applied to colours, &c. 479 Other applications of *ὀργή*. Words denoting kingly power. 480 Meaning of the phrase *ἐπιφέρειν ὀργάς*.

444 **W**HEN a verb in some finite tense is prefixed to some other verb in the infinitive, so that the two taken together form one notion, and then combination is equivalent to a periphrasis of some tense, we say that the finite verb is used as an auxiliary. The verbs most frequently employed in this manner are those expressive of the condition or power of the agent, of his freedom from external hindrances, whether moral or physical, of his thoughts, intentions, will, or desire. That the employment of auxiliaries originated in the substitution of syntactical contrivances for the etymological inflexions of the older language, after these last had fallen into disuse or had become less obvious and significant, has been already shown at some length. In most of the languages of modern Europe, the system of auxiliaries has superseded all inflexions of mood and tense, and, indeed, of voice too, in the common verbs. In our own language, some of the verbs employed for this purpose have lost their applicability as independent verbs: thus, we never say "to may," or "to can," or "to shall," or "to must," though "I may," "I can,"

"I shall," "I must," are in constant use, as auxiliaries, for the purpose of forming the potential mood, or the future tense, or an expression of obligation. In German, however, the verbs corresponding to these, namely, *mögen*, *können*, *sollen*, *müssen*, are capable of inflexion throughout all their moods and tenses with the exception of the participle present. It has been well remarked by Max Müller (*Oxf. Essays* 1856, p. 38), that "our auxiliary verbs have had to pass through a long chain of vicissitudes before they arrived at the withered and lifeless form which fits themselves so well for the purposes of our abstract prose." And it is a very vivid anticipation of their subsequent use as mere adjuncts for the expression of tense or time, when we find the verbs denoting growth and obligation appearing in the names of the three Fates, who were called *Vurdh*, *Verdhandi*, *Skuld*, i. e. past, present, and future time (*Zeitschr. f. vergl. Sprf.* III. p. 449), whereas in Greek the Destinies are represented as goddesses, who determine the fixed lot of the past (*Lachesis*), spin the thread of present life (*Clotho*), and decide unalterably what shall and must come into being (*Atropos*), (see Plat. *Resp.* p. 617 c: *Λάχαισιν μὲν τὰ γερονότα, Κλωθὰ δὲ τὰ ὄντα, Ἀτροπον δὲ τὰ μέλλοντα*).

445 We have said that the verb which the auxiliary modifies, or which forms the pivot of the meaning, is in the infinitive mood. That the auxiliary could not be so used with the participle is obvious. The infinitive is, indeed, as we have shown in a previous chapter, the same sort of word as the participle, but then it is a participle which has lost all power of change, being a form, sometimes mutilated, of the locative case, so that it expresses the locus of the action to which the possibility or will denoted by the auxiliary has immediate reference. The participle, on the contrary, being capable of inflexion, expresses an hypothesis or some subordinate relation of the verb from which it is derived, the subject being the nominative case of the principal verb; in fact, participle and verb are equivalent to two verbs joined by a copulative conjunction, and there is no more reason why the verb should be considered as auxiliary to the participle, than the participle to the verb. There are, indeed, some cases where the Attic idiom employs the participle of the verb on which the whole force of the sentence depends, while the finite verb plays the part of a qualifying adverb; as in the following instances (given by Buttmann, *Griechische Grammatik*, § 114, *Anm.* 8, and § 150); *τυγχάνω: ὥς δὲ ἦλθον, ἐτυχεν ἀπῶν*, "when I came, he went away *directly*" (schoolboys in this

country would be told to translate this "he happened to go away;" but *τυγχάνω* implies hitting a mark, coincidence, especially in point of time, just as we say in lowland Scotch, "I happened upon him," for "I fell in with him," and the young student should be taught to translate it "directly," "on the spot," "at the moment," or, in some cases, "precisely," as in Isocrates, *Areopagit.* p. 140 c: ἐγὼ δὲ δι' αὐτὰ ταῦτα τυγχάνω δεδιώς, "it is precisely on account of these things," or "on account of these very things, that I am afraid").—*λανθάνω*: ταῦτα ποιήσας, ἔλαθεν ὑπεκφυγών, "after he had done these things, he got off *unobserved*."—*φθάνω*: ἔφθασα αὐτὸν παρελθών, "I came *earlier* than he did," οὐκ ἔφθημεν ἐλθόντες, καὶ νόσοις ἐλήφθημεν, "we *no sooner* came than we were taken ill."—*διατελῶ*: διατελεῖ παρών, "he is *always* there."—*χαίρειν*: χαίρουσιν ἐπαινοῦντες, "they praise *gladly*." The last word may be used in a finite tense with the participle of the verb to which it refers. Thus we have not only οὐ χαίρων ἐπὶ ψόγοισι δειννάσεις ξιμέ (Soph. *Antig.* 758), "you shall not abuse me with impunity," but also οὗτοι χαίρησέτον (Aristoph. *Equit.* 235), "you two shall not escape unpunished." It will easily be seen, that in all these cases the verb connected with the participle cannot be considered in any intelligible sense as an auxiliary. It might be supposed, however, that the use of ἔχω with a participle of the aorist, of which Valckenaer has given so many examples (*ad Phœniss.* 712, p. 310), is a periphrasis for the perfect; and indeed, it is used in connexion with the perfect in the line of Æschylus, which he quotes: ποικίλωνε, ἀποδηλώσας ἔχει. We believe that it is not merely equivalent to the perfect (still less, as Valckenaer suggests, to the aorist), but that it has a stronger sense than the perfect, expressing not only a state consequent upon an action, but also a *continuance* in that state; thus, θαυμάσας ἔχω means "I keep wondering," "I continue in a state of wonder" (*Gr. Gr.* 577). In this same sense ἔχω is used in the participle where we should employ an adverb: thus, τί ληρεῖς ἔχων; "why do you talk nonsense *continually*?" or "why do you keep talking nonsense?" The only case in which a periphrastic tense is really formed by means of the participle is, when the finite verb signifies "existence," that is, when it is a substantive verb; but in that case the difference is not one of tense, unless the participle be itself future, but of voice: compare *ich werde gelobt*, "I am praised," with *ich werde loben*, "I shall praise." In French and Italian, the verbs *avoir*, *avere*, "to have," form a future tense with the infinitive and a perfect with the participle of the verb: compare *j'aimer-ai*, *io amer-ò* (§ 368) with *j'ai aimé*, *io ho amato*. But it must be recollected that these modern languages do not use the participle with such refinement of meaning as the ancient Greek, and in this particular case the passive participle is used as an adjective

agreeing with the object of the verb. In French, the past participle and the object are in the same gender and number when the object precedes, though the participle is not declined when the object follows: thus, they say *j'ai reçu votre lettre*, but *voici les lettres que j'ai reçues*. The principle has been fully explained by Du Marsais and other French grammarians. In old Italian, the past participle is frequently in concord with the object of the verb even when it follows; thus Dante:

Ed un ch' avea perduti ambo gli orecchi,

and Boccaccio: *Messer lo geloso s'avea messe alcune petruzze in bocca*. The future participle may often be translated by the infinitive, but this does not make the verb an auxiliary any more than *legatos misi qui peterent* is a periphrastic future. Even in phrases like ὅπερ ἦα ἔρῳν the use of ἔρῳν is distinct from that of the infinitive, though we should translate it in French or English, *ce que j'allois dire*, or "as I was going to say." The student who understands why φαίνεται εἶναι means "it appears to be" (*videtur*), and φαίνεται ὄν, "it manifestly is," i. e. "it appears so, and it is so" (*apparet*), need never feel any difficulty in discriminating between the syntactical uses of the participle and infinitive mood.

446 All verbs expressing power, will, &c., are, according to the idiom of the Greek language, immediately followed by an infinitive mood without any repetition of the subject of the primary verb when this is also the subject of the infinitive: τὸ γὰρ βούλομαι φιλολογεῖν, προαιροῦμαι ἀναγινώσκειν οὐ δεῖται τῆς προσδιαστελλούσης ἀντωνυμίας, ἐπεὶ δυνάμει ἐν αὐτοπαθείᾳ ἔχει τὰ τῆς συντάξεως, ἐπεὶ τοι πάλιν ἦν ὁ λόγος τοιοῦτος, βούλομαι ἑμαυτὸν πλουτεῖν, βούλομαι ἑμαυτὸν περιπατεῖν, τουτέστι διατίθεμαι εἰς τὸ περιπατεῖν, εἰς τὸ πλουτεῖν (Apollonius Dyscol. *de Syntax.* iii. 32, p. 285 Bekker). It is not, however, to be concluded that every word so used is use as an auxiliary. The finite verb is to be considered as an auxiliary, and its combination with the infinitive as a periphrastic tense, only when the two together express some one notion which might be expressed by an inflexion of the latter verb, and when the former is in consequence used with a highly abstract meaning, much vaguer than the sense which it bears when uncompounded. Thus, to take the words expressing power or qualification, in such phrases as οἷός τε εἰμὶ ποιεῖν τοῦτο, ταῦτα πέφυκεν ἐπὶ τὴν ψυχὴν ἰέναι, πρόπαν ἔφους πρὸ τῶνδε φωνεῖν, τλαίης κεν Μενελάω ἐπιπροέμεν ταχὺν ἰόν; the finite verb expresses only the abstract ideas, "I can,"—"these things are suited,"—"you are qualified,"—"dare you,"—being quite subservient to and dependent upon the verb in the infinitive mood; so that these constructions are entirely analogous to the Sanscrit periphrastic perfects, which,

though formed of a finite verb and the infinitive mood of another verb, are equivalent to and are written as single words: thus, *ἰζάμ-βαβήυα* is written as a single word, though it is analogous in form as it is equivalent in signification to *ἰζαίνειν βάβηυα*.

447 One of the Greek verbs expressing power or possibility is deserving of some particular notice, as well from its rareness as from its etymological connexion with a very interesting Sanscrit auxiliary. We refer to *σῶκέω*, "to be strong," a derivative from *σῶκος*, which appears in Homer, *Iliad*. xx. 72, as an epithet of Hermes:

Ἀητοῖ δ' ἀντίστη σῶκος ἐριούνιος Ἑρμῆς.

The verb occurs in two passages only; as an independent verb in Æschylus, *Eumenides*, 36: where, an old priestess, in great trepidation, says:

*ἦ δεινὰ λέξαι, δεινὰ δ' ὀφθαλμοῖς ἰδεῖν,
πάλιν μ' ἔπεμψεν ἐκ δόμων τῶν Λοξίου,
ὥς μήτε σῶκεῖν μήτε μ' ἀκταίνειν βάσιν,
τρῆχω δὲ χερσίν, οὐ ποδωκίᾳ σκελῶν.
δείσασα γὰρ γράῦς οὐδέν· ἀντίπαις μὲν οὔν.*

That *σῶκῶ* here is equivalent to *δῶννυμαι* is clear from a passage of Homer, which Æschylus ὁ φιλόμυθος had in his head when he wrote these lines. In a case, precisely the converse of this, an old woman is thus described as running to tell good news (*Odyss.* xxiii. *init.*):

*γορῦς δ' εἰς ὑπερῶν ἀνεβήσατο καρχαλώσα,
δεσποίνῃ ἐρέουσα φίλον πόσιν ἔνδον ἔοντα·
γούνατα δ' ἐρρόσαντο, πόδες δ' ὑπερακταίνοντο.*

(The editions read *ὑπερικταίνοντο*, an inexplicable word—the emendation we have introduced is supported by Hesychius, and the meaning of the passage; see Ruhnken *ad Timæum*, p. 20.) It must be clear to every one that the third line in the first of these passages is the negation of the third line in the second. But *σῶκῶ* occurs as a mere auxiliary in Sophocles, *Electra*, 120:

*μούνῃ γὰρ ἄγειν οὐκέτι σῶκῶ
λύπης ἀντίρρόπον ἄχθος,*

which Porson neatly translates "for I am no longer able by myself to draw up the weight of grief which is in the opposite scale." It is in this use that we are to compare *σῶκῶ* with the Sanscrit root *śak*, which is not only the most general word signifying ability or strength, but also an auxiliary possessing this peculiar power, that, when prefixed in the passive to an active infinitive (the Sanscrit language has no passive infinitive), it gives the verb with which it is joined a passive

signification, as in the *Nalas*, xx. 5, *na dhartuñ çak-ya-tê*, which is as if you were to say in Latin *afferre nequitur* for *afferri nequit*; see the examples of this idiom quoted by Lübker, *de Participiis Græcis Latinisque*, p. 29, note; and compare the Latin infinitive future passive *amatum iri* (Bopp, *Glossar. Sanscrit.* ed. 1, p. 171). The root *çak* is perhaps found also in the Irish *ceach-t*, "power," and in *çó-na-ri* for *coc-na-ri* (Bopp, *Gloss.* ed. 2, p. 341).

448 The verbs *ἐθέλω* and *μέλλω* are used more distinctly as auxiliaries than any others in the Greek language. They properly express a will or intention, but are employed by the best authors to form periphrastic futures, in which they merely modify the time of the verb which accompanies them in the infinitive mood. Thus *ἐθέλω* is used in speaking of inanimate objects, as in Plato, *Respubl.* ii. p. 370 B: *οὐκ ἐθέλει τὸ πρᾶττόμενον τὴν τοῦ πράττοντος σχολὴν περιμένειν*, where the sense of will or intention is so entirely lost that the grammarians consider it as equivalent to *δύναμαι* (see Gregor. *Corinth. de Dialect. Attica*, § LXVII.: *Ἀττικὸν καὶ τὸ θέλει ἀντὶ τοῦ δύναται. ὡς Πλάτων. "τὰ χωρία οὐδὲν μ' ἐθέλει διδάσκειν"* (*Phædrus*, p. 230 D), *ἀντὶ τοῦ δύναται*); and *μέλλω* is so constantly used in forming the future tenses of verbs, that *ὁ μέλλον χρόνος* is the regular name for future time, and *τὰ μέλλοντα* for future or expected events.

449 We purpose to devote the remainder of this chapter to an etymological investigation of the most important Greek words denoting will or desire. It is a matter of some interest to point out their primary meanings and their connexion with one another, and, as it would be difficult to do this in a satisfactory manner without the aid of the principles which we have endeavoured to establish and explain in the preceding pages, a detailed examination of the question will not perhaps form an inappropriate conclusion to this work.

The words which we shall more particularly examine in this place are *λάω*, *θέλω*, *βούλομαι*, *μάω*, *θυμός*, and *ὀργή*, all expressive of will, desire, or intention. As the discussion will be long, and encumbered with references and remarks upon cognate words, it will be as well, for the sake of clearness, to state beforehand some of the general results to which the investigation will lead us.

450 It has been mentioned in a former chapter (above, §§ 266 sqq.), that there are two roots, *la-* and *ra-*, corresponding as well etymologically as in signification, which may be traced back to an identity with the pronominal element *na*. The primary meaning of these elements, in their use as particles or terminations, is—motion in a

given direction (above, §§ 130, 169, 204, 270, and elsewhere). From this meaning results the idea of taking or seizing an object, just as the preposition *με-τά* signifies both "following after" and "companionship" (§ 181). The meanings "to look at" and "to desire" are also secondary ones, which association has attached to the root, but which it could not by itself express in any strong or decided manner. We have endeavoured to show, on a former occasion (above, § 169), that, if the element *-ra* is subjoined to any pronominal stem, it denotes motion or continuation in a line of which the first point is indicated by the particular pronominal word. If, then, this element were appended to the first or second pronominal stems, *ma*, *fa*, it would denote primarily a motion or emanation from the subject, or from that which is near to the subject. Of the former combination we have the following examples. The synonyms *μέ-λος* and *μέ-ρος* both express "division," "separation of any object into its parts." Now, if we resolve the sentiment or notion of division into its ultimate elements, we shall find that it is reducible to the idea of a line proceeding from the divider and cutting another line, the position of which is fixed. It is for this reason that the adjective signifying "middle" is formed by the adjunct *ya* from *mat*, the ablative of the first personal pronoun, which case of itself denotes emanation, or proceeding from (§ 247). This adjective is in Sanscrit *madhya*, in Latin *med-ius*. That the Greek *μέσσος* was originally *μέσ-ιος* for *μέδ-ιος*, we have shown above, from the analogy of *ἴδ-ιος* (§ 166); to which we may now add, that the form *μέσιος* at least is presumed in the derivative *μεσίτης* (see above, § 259). The primary meaning of *medius*, &c., "is the quality of that which proceeds from the *me*." Sometimes the proposition *διά*, which signifies penetration or division into two parts, is prefixed not only to the adjective *μέσσος*, *medius*, as in *ἡμισυ*, *dimidius* (above, § 166), but also to the substantive *μέρος*, as in *ἡμερος* (above, § 150), in order to express more strongly the idea of "bipartition" or "a passage;" cf. *meri-dies* = *medius dies*. For further coincidences in meaning between these elements, we may compare *μέλ-λιν*, *μελέ-τη*, *μέρι-μνα*, *μάρ-τυς*, *μερ-μηρ-ίζειν*, *me-mor*, *mora*, &c., with *meditari*, *mederi*, *re-medium*, *modus*, *moderari*, &c., in which the idea of "thinking about or providing for any thing" predominates. Nor ought the connexion of *μέδι-μνα* with *μέρι-μνα* to be overlooked. For the meaning of *μάρ-τυς**, *me-mor*, &c., we may compare the poetical *ἐνδατεῖσθαι*, which means literally "to divide," but is generally used in the signification

* The *Etym. M.* connects *μάρτυς* directly with *μάρη* = *χείρ* — *μάρτυς* ὁ μάρψας καὶ εἰδὼς τὸ ἀληθές. See Lobeck, *Πηγματικόν*, p. 8. With this view we might compare the Latin *mani-festus*.

“to commemorate” or “make mention of,” as in Æschylus (*apud Platon. in Republ. II. ad fin.*): τὸν Ἀπόλλω ἐνδατεῖσθαι τὰς ἑὰς εὐ-
 παιδίας (above, § 178). If we now turn to the second pronominal element we shall observe the following facts. This pronoun, in its oldest element, is *Fa*, or it consists of a guttural and labial, articulated, of course, by means of a short vowel. In combination with the element *-la* or *-ra*, it always bears a meaning derivable from one analogous to that of the similar formation with the first element: i. e. the primary meaning of *Fa-ra* is “motion from the *near*,” as *ma-ra* means “motion from the *here*.” It will be seen at once that these two meanings may present many points of contact. We have indicated in a former chapter, the many coincidences of the roots *χα-ρ*-, Sanscrit *hr̥*, and *Fa-ρ*-, Sanscrit *vr̥* (above, § 258, and elsewhere). The investigation, on which we are about to enter, will render it probable that they are, after all, only by-forms of the same root *Fa*, the former representing the guttural, the latter the labial element of the initial digamma. We have already discussed so thoroughly the secondary meanings of these roots, that it will only be requisite in this place to collect the forms in which they occur. With meanings intimately connected the guttural element appears in *χείρ*, *ῥά-ρις*, *ῥά-ρ-πος*, *αῖρ-εῖν*, *ἐλ-εῖν*, *grei-fan*, *γέν-ειν*, *can-is*, *hin-than*, *hand*; the labial in *vin-star*, *fan-gen*, *fin-ger*, *πέμ-πε*, *pan-chan*, *five*; and both elements in *span*, *span*, *κύων*, *hun-d*. In the sense of seeing and taking, borne by *la* by itself, and occasionally with an additional *Fa* subjoined, we have *β-λέ-πω*, *β-λά-π-τω*, *γ-λαυ-κός*, *γ-λή-νη*, &c. In the sense of willing or wishing, also borne by *-la*, we have, from the guttural element, *θέ-λ-ειν* for *ἐλεῖν*, as *θάλασσα* from *σάλασσα*=*ἄλασσα*, &c. And here the compound of *-la*, *-ra*, with the second root, presents a most remarkable contact to the same combination with the first; for as we have *γέν-το*, *han-d*, &c., in connexion with *ἐλεῖν*, so we have *θέν-αρ*, “the hollow of the hand,” in connexion with *θέλ-ω*, and *manus*, “the hand,” in connexion with *μάρ*=*χείρ* (*Schol. Venet. Iliad. xv. 37*, whence *εὐ-μαρής*=*εὐχερής*); and the words *θέρος*, *θερίζω*, express the idea of “smoothness,” “cutting down that which is sticking up” (namely, standing corn), just as these same ideas are conveyed by the more general words *μαν-ρός*, *ἄ-μα-λός*, and *ἄ-μά-ω* (above, § 218). Finally, it will appear that as the root *la* or *ra* by itself, or with the suffix *Fa*, expresses motion in general, and particularly the emotion of desire, so the first and second elements under the forms *ma* and *sa* or *tha*, with or without the suffix *Fa*, express the very same ideas—motion in general, and desire in particular; as will appear from an examination of the verbs *μάω* and *θύω*; and thus it will be seen, that the ideas of will or desire, when expressed by verbs (with the exception of *βούλομαι*, which is a totally

different case), are resolvable into pronominal elements or words significant of position, just as we have shown in the case of *vacas* and *ἐκα* (§ 275).

451 We begin with *λάω*, which means not only "to wish," but also "to take," and "to see." How *λάω* can signify both "to have," and "to want," has been already explained on general principles (§ 53), and the analogies of *capio* and *cupio*, *havere* and *habere*, *gestire* and *gerere*, are also so many illustrations of it in this particular case; it will be recollected too that *πλεονέκτης*, *πλεονεκτεῖν*, *πλεονεξία*, imply not only having more, but covetousness or desire to possess more (see Herodot. vii. 149, 158, viii. 112). The two meanings "take" and "see" will cause no difficulty to any one who recollects that the German *tragen*, "to carry," and *trachten*, "to look at," are by-forms of the same root, and that *percipere*, "perceive," is formed from *capio*, "take." The connexion of "looking at," and "longing for," is obvious, and the German word *sehnsucht*, which expresses an earnest desire, is an instance of it. These meanings, "see," "take," and "wish," run through a large class of word containing some modification of the root *λα-*, by a series of transitions perfectly similar to those we have remarked in the words belonging to the root *χα-ρ-*, and the transitions may be explained in precisely the same way by a reference to the principle of the association of ideas. This class is indeed a very numerous and important one, for it contains all the old Greek words beginning with *λα-*, *λε-*, or *λυ-*. In the verb *λάω* itself, the succession of meaning is, we conceive, first, simply "to see," then "to take," and thirdly, "to wish." In Homer it is doubtful if it bears any meaning but the first. In the Hymn to Mercury (v. 360), where we have *αἰετὸς ὃς ἐν λάων*, it evidently means "seeing." The word occurs twice in the description of the cloak of Ulysses (*Odys.* xix, 229), where it is rather uncertain whether it means "to hold" or "to look at." Either meaning would suit the context; Passow takes the latter; we incline to the former. The words are as follows:

ἐν προτέροισι πόδεσσι κύων ἔχε ποικίλον ἔλλον
ἀσπαίροντα λάων· τὸ δὲ θανμάζεσκον ἅπαντες
ὥς οἱ χρύσειο ὄντες, ὁ μὲν λάε νεβρὸν ἀπάργων,
αὐτὰρ ὁ ἐκφυγέειν μεμαὸς ἥσπαιρε πόδεσσιν.

We think the last two words favour the former interpretation: ὁ κύων εἶχε τὸν νεβρὸν ἐν προτέροισι πόδεσσι, λάων αὐτὸν ἀσπαίροντα, ὁ δὲ νεβρὸς ἥσπαιρεν ἐν πόδεσσι τοῦ κυνός. A curious confirmation of this view is furnished by the relation between the name of Laïs and her symbolical monument: Paus. ii. 2, 4: τάφος Λαῖδος, ᾧ δη λέαινα ἐπιθήμιά ἐστι κρῖον ἔχουσα ἐν τοῖς προτέροις ποσίην.

452 The words connected with *λάω*, in the sense of "seeing," are *β-λέπω*, *λεύσσω*, *γ-λήνη*, *γ-λαύσσω*, *λαμπρός*, and *λευκός*. Hesychius quotes *λεύσει* (*βλέψει*, *θεωρήσει*), apparently as the future of *λάω* in this first sense; we might conclude that it is merely a mistake for *λεύσσει*, because in the next article he explains *λεύσετε* by *δρᾶτε*, *βλέπετε*; but it appears from the Scholiast on Homer, that Aristarchus considered it a future (see Alberti's note, 19). From the forms *ἀπο-λαύ-ω* = *ἀπο-λα-μ-βάνω*, *β-λέπω*, and *λεύσσω*, we are inclined to infer that the root was generally strengthened by the element *Fa*, that is to say, there is a secondary root *λα-F-* (formed of this root and the suffix *Fa*), which enters into the words in question: if so, *λάFω* bears the same relation to *λεύσσω*, that *λᾶFας*, another word of the same family, bears to *λεύς*, its synonym, and is related to *β-λέπω* just as *λᾶFας* is related to the Latin *lapis*. The same may be said of *γ-λαύσσω*, *λαμπρός*, and *λευκός*.

453 The suffix *Fa* also accounts for the labials which so often appear in words of this family bearing the second signification "to take." Thus we have *λα-μ-βάνω* (where the *μ* is an euphonic insertion by way of *anusvāra*, as in *λα-μ-πρός*), *λαπ-άξω*, *λαφ-ύσσω*, *λαύ-ρα*, *λαβύρινθος*, and *ἀπολαύω*. The forms *λέγ-ω*, "to pick up," "select," "take one by one," "utter articulate and continuous words," and its derivative *λέχος* (properly, "a bed made up of gathered or picked leaves"); the by-form *λέσχη*, a "speaking place," for *λέγ-σκη* (above, § 219), *λάσκω*, *λάκω*, "to speak," *ἀδολέσχης*, "a great speaker;" also *λα-γ-χ-άνω*, "to receive by lot," and its substantive *λάχος*; and *λάξομαι*, "to take hold of;" must be regarded as containing the same root differently modified.

454 A word more nearly connected with *λάFω*, *λα-μ-βάνω*, though we are not accustomed to view it in that light, on account of the *β* which is prefixed, is *β-λάπτω*, with its derivatives *β-λάβη*, &c., which are perfectly analogous to *λαβή*, &c. Another reason for our disregarding the connexion between *β-λάπτειν*, *λάFω*, and *λαμβάνω*, is, that we attend only to the derived sense of the former word, and disregard its proper and original meaning. The word *β-λάπ-τω* does unquestionably imply, in many cases, a certain degree of harm or mischief, but even where it bears this sense, it is a sort of hindrance or accidental harm, some mere pain or loss, that is denoted, and never an injury of that kind which can cause resentment (see Butler's *viii*th *Sermon*). In fact, this distinction is frequently pointed out in the best Greek writers. In the following passage of Thucydides, for instance (I. 71), where the Corinthian ambassador says to the Spartans: *οἷσθε τὴν ἡσυχίαν οὐ τούτοις τῶν ἀνθρώπων ἐπὶ πλεῖστον*

ἀρκεῖν, οἳ ἂν τῇ μὲν παρασκευῇ δίκαια πράσσωσι, τῇ δὲ γνώμῃ, ἣν ἀδικῶνται, δῆλοι ὧσι μὴ ἐπιτρέψοντες, ἀλλ' ἐπὶ τῷ μὴ λυπεῖν τε ἄλλους καὶ αὐτοὶ ἀμυνόμενοι μὴ βλάπτεσθαι τὸ ἴσον νέμετε—the distinction between ἀδικεῖσθαι and βλάπτεσθαι is clearly shown by the opposition of δίκαια πράσσειν to the one, and μὴ λυπεῖν to the other. This passage is considered a difficult one, and has been misinterpreted, we think, by all the commentators. The meaning is, "it is not your opinion that those persons enjoy peace the longest who, while they act justly, show that they have made up their minds not to submit to injury; but you observe the rule of non-interference, i. e. you are strictly neutral or impartial, on the principle of not hurting others and of avoiding the inconveniences to which reprisals would subject you." For the μὴ βλάπτεσθαι we may compare Æschylus, *Suppl.* 577: ὑμῖν δ' ἀρήγειν οὐκ ἔχω βλάβης ἄτερ. The preposition ἐπὶ here implies a principle or condition of action—as in Demosthen. *Philipp.* II. p. 68: ἡγεῖτ' οὖν, εἰ μὲν ὑμᾶς ἔλοιτο φίλους, ἐπὶ τοῖς δικαίοις αἰρεῖσθαι. The phrase τὸ ἴσον νέμετε, means "to act fairly or impartially to both of two parties." Thucyd. VI. 16: ὥσπερ δυστυχοῦντες οὐ προσαγορευόμεθα, ἐν τῷ ὁμοίῳ τις ἀνεχέσθω καὶ ὑπὸ τῶν εὐπραγούντων ὑπερφρονούμενος, ἢ τὰ ἴσα νέμων τὰ ὁμοῖα ἀνταξιούτω—"if a man treats his inferiors as equals, he has a right to claim the same treatment from his superiors." Herodot. VI. 11, and 109: θεῶν τὰ ἴσα νεμόντων, "if the gods remain neutral." Aristotle (*Rhet.* I. 10, p. 1368 Bekker), by defining τὸ ἀδικεῖν as βλάπτειν, with the addition of purpose and illegality, implies that βλάπτειν was never considered to imply an injury or any thing more than mere pain or loss occasioned unwittingly, or by an inanimate object. He says—ἔστω δὴ τὸ ἀδικεῖν τὸ βλάπτειν ἐκόντα παρὰ τὸν νόμον. It is well known that the original meaning of the word is "lay hold of," "stop," "retard," "impede;" as appears from the following passages.

Homer, *Iliad* VI. 38:

ἵπῳ γάρ οἱ ἀνυζομένῳ πεδίῳ
ῥῆξεν ἐνὶ βλαφθέντῃ μυρκίνῳ—, "caught in."

Odyss. I. 195:

ἀλλὰ νῦν τόνγε θεοὶ βλάπτουσι κελεύθου—

"stop him from his journey." On which Eustathius remarks: βλάπτειν, κυρίως τὸ ἐμποδίζειν τὸν τρέχοντα.

Æschyl. *Agamemnon*, 118:

βοσκόμενοι λαγίναν, ἐρικύμονα φέροματι, γένναν,
βλαβέντα λοισθίων δρομών,

"things (i. e. the hare and her young) stopped from running any more

paces," as in Hor. iv. *Carm.* vi. 34: "Delix tutela Deæ fugaces Lynceas et cervos *cohibentis* arcu," i. e. "sistentis in fuga, dum eos sagittis transfigit" (Orelli).

Sophocles, *Electra*, 696:

ὅταν δέ τις θεῶν
βλάπτῃ, δύναιτ' ἂν οὐδ' ἂν ἰσχύων φυγεῖν,

"whenever any god stops one's flight, the best runner cannot get off:"
Ajax, 455:

εἰ δέ τις θεῶν
βλάπτοι, φύγοι γ' ἂν ᾧ κακὸς τὸν κρείσσονα,

"if any one of the gods were to stop the pursuer."

We do not consider the word βράψαι, which is mentioned by Hesychius (βράψαι, συλλαβεῖν) as a synonym for βλέψαι, and which certainly is very like it in sound, to be connected with this root. Βράψαι, as Buttmann has remarked, is connected with μάρπτω, just as βλάξ is with μαλακός; μάρπτω is derived from μάρη=χείρ, and the same root is found in εὐμαρής, a synonym for εὐχερής. The word μαρήγει (=λαμβάνει Hesych.) is, perhaps, as Alberti supposes, a corruption for μάρπτω. We do not look upon β-ραβεύς as connected with βράψαι: it is derived, as we have elsewhere surmised, from the δράβδος, which was the umpire's mark of distinction.

455 In the word λεία, "a booty," "that which is taken," also λῆϊς, Dor. λαῖς, the connexion with λάω need hardly be pointed out: λισπή and λισσή are by-forms (see Hesychius). The common name for the lion, λέων, "the seizing animal," clearly belongs to this second class of the family of words into which the root λαF- enters. The digamma in this name is preserved in the German *Löwe*, old German *Lev*. We have stated above (§ 282), that χάρων is another name for the lion, and that it means "the roaring beast." The Sanscrit name *sinha*, according to Lassen (*Ind. Alterthumsk.* i. p. 295, note 5), means "the slayer," probably for *simbha*, from *sibh*, "to slay." If so, it is only by an accidental coincidence that Æschylus (*Agam.* 697) speaks of the lion as a σίνις or "destruction," for this cannot be the origin of συνέομαι, &c. That the lion should have several names is not at all wonderful. "Of every thing in nature," says Bopp (*Annals of Oriental Literature*, p. 26), "of every animal, of every plant, speech can seize only one quality, in order to express the whole by it. The elephant is called in Sanscrit *dantin* (nominative *danti*) from his teeth, or *dvirada* (endued with two teeth), or from his trunk serving him as a hand, he is called *hastin* or *karin* (nominative *hasti*, *kari*);

from his habit of taking water in his trunk and then drinking when he pleases, he is called *dvipa* (twice drinking). Were the Sanscrit to express all these qualities of the elephant by one word, it would be obliged to join all those mentioned together, and to add a great number of others. The serpent is called from his motion *sarpa* or *pan-naga*, going not with feet (from *pad*, foot, *na*, not, and *ga*, going); or *uraga*, going upon the breast. Besides many other names, the serpent has also in Sanscrit that of *pavanâçana*, wind-eating." In a passage of the *Nalas* (xx. glôk. 1), *khê-charah*, "going in the air," is used as a name for "a bird," but the etymology is indicated in the comparison: *achirên'a atichakrâma*, *khê-charah khê charann iva*, "he passed [by [the rivers, &c.] rapidly, like an air-farer faring in the air." Besides this it may be mentioned that *cervus* is nothing but κέρεφος, "the horned animal," that *lobster*, *clubster*, or *clubstart* (= *clubtail*), is the English name, not merely for a thick-tailed shell-fish, but also for the stoat, an animal with a tuft on his tail (*Quarterly Rev.* Vol. LVII. p. 90), just as αἴλουρος = αἰόλουρος and σκίουρος refer to the *striped* (αἰόλος δρᾶκων conveys the same idea; see above, § 97) or *thick tails* of the cat and squirrel, that ἄλωπῆξ appears from the Sanscrit word *lôpâçaka* to signify "the carrion-eater" (the other Sanscrit name for the fox, *lômaça*, means "hairy"), that the dog is called "the taker," *canis*, *hund*, &c., in all languages of the Indo-Germanic family (above, § 269), and so on (see *Varron.* p. 155). In λαΐφος, *lapis*, the idea of taking up is clearly implied, for the idea of "a stone" is that it is something detached and movable, and, if we are right in supposing that λέγω also belongs to this root, it is an encouragement to the supposition that λαΐφος belongs to it also, when we find λέγω, λογάδην, &c., especially applied to the picking and placing of stones. This etymology is much confirmed by the fact that the Sanscrit *çilâ*, fem. "a stone," is manifestly of the same origin as *çil*, to "glean," and *çilam*, neut. "a gleaning of the ears of corn." The oldest walls in Greece, especially those which are called Cyclopean, were formed of picked stones, which were adjusted together without cement, as they happened to fit, the intervals between the larger blocks being filled up with smaller stones. Hence the idea of selection, of placing the small with the great, became identified with that of a stone, and it was customary to speak proverbially of such arrangements, without alluding to the word λίθος. Thus Sophocles says (*Ajax*, 158):

καὶ τοὶ μικροὶ μεγάλων χωρὶς
σφαλερὸν πύργον θῦμα πέλονται·
μετὰ γὰρ μεγάλων βαυδὺς ἄριστ' ἂν
καὶ μέγας ὀρθοῖθ' ὑπὸ μικροτέρων.

ἀλλ' οὐ δυνατόν τοὺς ἀνοήτους
τούτων γνώμας προδιδάσκειν*.

The last line shows that the chorus is reciting a proverb, like the Italian:

*Duro con duro
Non fa bon muro.*

Or the German:

*Hart gegen Hart
Nimmer gut ward†.*

It is very strange that all the commentators have failed to perceive this obvious interpretation, which is confirmed by a passage in Plato, *Legg.* p. 902 D: οὐ μὴν οὐδὲ κυβερνήταις οὐδὲ στρατηγοῖς οὐδ' οἰκονόμοις οὐδ' αὖ τίσι πολιτικοῖς οὐδ' ἄλλω τῶν τοιούτων οὐδενὶ χωρὶς τῶν ὀλίγων καὶ μικρῶν πολλὰ ἢ μέγала· οὐδὲ γὰρ ἄνευ μικρῶν τοὺς μεγάλους φασὶν οἱ λιθολόγοι λίθους εἶ κεῖσθαι. Of the change of the vowel in *λίσπη*, *λίσση*, and *λίθος*, we shall have further examples in the third set of words from this root.

456 Of *λάω*, in the sense of “to wish,” we have the following forms, *λῶ*, *λῆς*, *λῆ*, *λῶντι*, and the optative *λέωμι* (Hesych.); also the reduplicated forms *λι-λαίεσθαι* (=ἐπιθυμεῖν, ὀρέγεσθαι. σπεύδειν. Hesych.) and *λι-λεῖ* (=φθονεῖ, ἐπιθυμεῖ. Hesych.); *λίσσομαι* and *λίτομαι* likewise belong to this root; for their form compare the words *λίσση* and *λίθος*. Another form is *λικάζει* (=ἐπιθυμεῖ Hesych.), with which may be compared *γ-λίχομαι*. To these we may add *λίπτω*, *λελμμένος*, and *λίψ* (=ἐπιθυμία Hesych.), which appears to have the same origin with the Latin *libet* and *libido*. We do not consider the quantity of the first syllable as any objection to our classing *λιμός* and *λιπαρός* in this set of words. We have seen all through the words derived from *λαF-*, in all three significations an indiscriminate use of the vowels

* If we might adopt the quaint style of the sixteenth century, the proverbial tone of the whole passage might be given thus:

“Great without small
Make a bad wall;
For the help of the great
Makes the little go straight,
And the nobles endure
With the aid of the poor.
But wisdom may preach—
She never will teach
These maxims of good
To the minds of the rude.”

† Lehmann's *Florilegium* in Lessing's *Werke*, Vol. xi. p. 672 Lachmann's edition.

α, ε, ι. This has taken place on account of the connecting vowel being short, and the root terminating in a digamma, which has been represented in the derived words by a great variety of substitutes. The lengthening of the syllables λιπ- and λι- in the words λιπαρός and λιμός may perhaps be indicative of a lost *guna*. At all events, this is a more satisfactory account of λιπαρός than the old explanation ἀπὸ τοῦ λίαν παρεῖναι. It must be allowed too, that the connexion which Passow points out (*s. v.* λιπαρός, 5) between the meanings of λιπαρός and λιπαρός is sufficient to establish some sort of relationship between the words; for λιπαρός, even when it is applied to bright, shining substances, immediately refers to one meaning of its primitive λίπα (*cf.* *Il.* xviii. 596, *Od.* vii. 107; below § 461), and λιπαρός may have denoted originally the clammy, viscous, and adhesive nature of oil. If there is really an affinity between λιπαρός and λιπαρός, and if the supposition of a *guna* is not allowable, the difference of quantity has arisen from one of those accidents in language which cannot be properly accounted for by any causes known to us.

457 Before we proceed to consider θέλω and βούλομαι, it will be necessary to investigate the words αἴγλη, ἀγλαός, and ἀγάλλω, which Passow assigns to this root. A careful investigation will show us how far this is the case. The first of these words has excited some interest from an ingenious attempt which was made some years since to give a new meaning to it in the *Philoctetes* of Sophocles (*v.* 816). The passage runs as follows:

Ἦπν' ὀδύνας ἀδάης, Ἦπνε δ' ἀλγέων,
εὐαῆς ἡμῖν ἔλθοις
εὐαίων, εὐαίων ὄναξ·
ὄμμασι δ' ἀντέχοις τάνδ' αἴγλαν
ἃ τέταται τανῦν.

In the *Rheinisches Museum* (for 1828, p. 125, translated in the *Philological Museum*, i. p. 468), Welcker has endeavoured to prove from Bekker's *Anecdota* (p. 354), from Hesychius, and from Pollux, that, in the passage of Sophocles just quoted, αἴγλη signifies a band which Sleep was begged to continue holding before the eyes of the slumbering hero. In a subsequent paper (*Rheinisch. Mus.* for 1833, p. 454, note 3) he has made some additional remarks on the same subject.

It appears to us, that though Welcker's interpretation of the passage in Sophocles is characterized by his usual ingenuity, there are serious objections to it, and that he has proved nothing except that αἴγλη may signify a glittering band, just as it might describe any other brilliant and splendid decoration, or as the phrase αἰγλᾶν χρυσέω θυσάνω is used by Pindar to describe the golden fleece (*Pyth.* iv. 231).

One great objection to the application of this sense of *αἴγλη* to the line of the *Philoctetes* is, that in the other two passages in Sophocles where this word occurs it manifestly bears a different signification. In the *Œd. Tyr.* 207,

τάς τε πυροφόρους
Ἀρτέμιδος αἴγλας, ξὺν αἴς
Λύκι' ὄρεα διάσσει—

the word refers to the two torches with which Artemis is represented on ancient coins. In the *Antigone*, 610,

ἀγῆρω δὲ χρόνῳ δυνάστας κατέχεις Ὀλύμπου
μαρμαρόεσσαν αἴγλαν,

the epithet shows clearly enough that *αἴγλη* implies nothing but the splendour and brightness of the abode of the gods. It might be thought that this last passage is a sort of confirmation of Welcker's opinion, and that *μαρμαρόεσσαν αἴγλην* refers to the band of snow with which Olympus is capped; but this cannot be: *μάρμαρος* was not used in Sophocles' time to signify a white stone more than any other bright, polished stone. The word *μορόεις*, which, as Döderlein justly remarks (*Lat. Syn. und Etym.* ii. p. 81, note), is connected with *μαρμαίρω*, is used as an epithet to earrings in *Iliad* xiv. 183; *Od.* xviii. 298, and it is certainly not hinted in either passage that the stones in the earrings were white. Besides, a poet, so full of taste and art as Sophocles, would never have expressed such an allusion in so frigid a manner. Our chief objection to Welcker's interpretation of the *Philoctetes* is this, and we think it is decisive: we can gather from the context that Sophocles intended to use the word in its primitive sense. The chorus says afterwards (847) in a parenthetical way—*ἀλεῆς ὕπνος ἐσθλός*, "sleep in the sunshine is good for our purpose," i. e. because it is very sound. If this was a common opinion, it was natural enough for the chorus to pray that sleep would keep before the eyes of Philoctetes the light of the sun (*αἴγλη*) which was spread over them and prevented him from waking. That *αἴγλη* refers to the brilliant light of the sun in particular may be gathered from the hints of the lexicographers. *Anecd. Bekkeri*, p. 354: καὶ ἡ θυσία δὲ ἡ ὑπὲρ τοῦ κατακλύσμοῦ εἰς Δελφούς ἀπαγομένη αἴγλη ἐκαλεῖτο (it will be recollected that the Delphian god was also the god of the sun) ἀλλὰ καὶ ἡ σελήνη. Hesychius has the following articles: *Αἰγ-λάηρ. ὁ Ἀσκληπίος* (because he was the son of Apollo). *Αἴγλης Χάριτες. πιθανῶς ἐγενεαλόγησαν τὰς Χάριτας, Αἴγλης καὶ Ἡλίου, ἐπεὶ τὰς Χάριτας λαμπρὰς εἶναι δεῖ, and Αἴγλητήν. ἐπίθετον Ἀπολλωνος*, where Toup quotes Apollon. Rhod. iv. 1716:

αἴγλη τὴν μὲν ἑὺσκόπου εἵνεκεν αἴγλης
Φοῖβον κεκλόμενοι.

Let us add a remark which we think is also of some importance. It cannot have escaped any one that all writers are apt to repeat themselves. Now, although we are told that Sophocles published the *Philoctetes* 31 years after the *Antigone*, it cannot be believed that he never read the latter again: the beautiful chorus, from which we have just quoted (l. 583 foll.), must have been constantly in his mind, and we have no doubt was present to his memory when he wrote the lines in the *Philoctetes* which we have been discussing. A line or two before μαρμαρόεσσαν αἴγλαν the following passage occurs (600):

νῦν γὰρ ἐσχάτας ὑπὲρ
ρίξας ὃ τέτατο φάος ἐν Οἰδίπου δόμοις κ. τ. λ.

It will readily be understood what train of thought led him to substitute for ὃ τέτατο φάος in the one passage the perfectly synonymous αἴγλαν ἃ τέταται which we find in the other (cf. Plato, *Resp.* 616 B: διὰ παντὸς τοῦ οὐρανοῦ τεταμένον φῶς εὐθύ), and how the αἴγλη, which occurs so shortly after in the *Antigone*, became mixed up in the same sentence in the *Philoctetes*.

458 To return, however, from this digression, which has little to do with the etymology of αἴγλη (and that is the point we have now to discuss), we agree with Lobeck (*ad Soph. Aj.* 40, p. 97) in classing αἴγλη among the derivatives from ἄω, or as it should be written, Φάω. The labials may be recognised in *Favonius* and *vapor*, and perhaps also in φάος=φάφος=φαφος: compare the Sanscrit *bha-va-t* with φῶς, φωτός (above, § 257). The *p* in *vap-or* as well as in the cases of a similar insertion which he mentions (note 14): δρᾶω, δραπέτης; θάω, θάπω; μέλος, μέπλω; κείρω, *carpo*, κάρπος; κοῖλος, κόλπος; λάς, *lapis*; χάω, *carpio*; τρέω, *trepidus*; περόνη, πόρπη; λυο, *lupercus*; are all, we think, to be explained in the same way. The other words connected like αἴγλη with ἄω are as follows—αὔω, αὐγή, αὔρα, ἀήρ, αἰθήρ, αἰθω, αἰθύσσω, *aestus*, αἰολος, *aestas*, αἰέσω, αἶξ (genitive αἶκος), αἶξ (genitive αἶγος), and αἶγίς. In all of these we find the cognate ideas of blowing, flaming, shining, flickering, moving rapidly. That these ideas are related to one another and to those of “blowing” or “the motion of the air,” and of “light” or “brightness,” is clear from a comparison of *flare* with *flagrare*; of φαῦλος with *felix*, *faustus* (above, § 152); of λευ-κός with *lev-is*; from the various meanings of *micare* and “light;” and from the two uses of *καταιθύσσω* in Pindar (*Pyth.* iv. 83, v. 11). We have shown above that the stem

λα- or λα-F-, which enters into words bearing all these meanings, primarily signifies only motion in general.

459 To this class of words then, we agree with Lobeck in referring the first syllable of αἴ-γ-λη, "the light of the sun"; and we entertain no doubt that ἀγάλλω and ἄγλαος are derived from it: that ἄγλαος, at least, is, appears from the fact that Ἀγλαΐη, one of the Graces, was called by Hesiod by the same name as her mother Αἴγλη (Senecr. *de Benefic.* i. 3, § 6). We consider the ending to be a formation of the pronominal root *Fa*, under the form *ga*, with the element *la*, which we have discussed above, and we proceed to show that whether it appears as γε-λάω, σέ-λας, ἔ-λη, or ἄ-γ-λα-ος, it conveys the same general notion of light or brightness. In Latin the ideas of "shining" and "laughter" are mixed up with one another: *renīdeo*, "to throw back light," a by-form of *nīteo*, is connected in meaning, perhaps in origin with *rīdeo*, as is proved by the following passages (quoted by Döderlein, *Lat. Syn. und Etym.* ii. p. 73). Catullus, xxxix. 15:

*Renidere usquequaque te nollem
Nam risu inepto res ineptior nulla est.*

Tacitus, *Annal.* iv. 60: *Tiberius torvus aut falsum renidens vultu*, and Acron *ad Hor. Carm.* ii. 18, 2: *Nidor a nimio odore dictum, seu risu, unde et renideo*. That the much spoken of *ποντίων κυμάτων ἀνήριθμον γέλασμα* of Æschylus (*Prom.* 90) refers to the infinitude of glittering spangles which one may observe on the sea when a gentle breeze is passing over it in sunny weather, must, we think, have struck every reader of taste. It is well known too, that in modern French the epithet *riant*, or "smiling," is constantly used in speaking of landscapes, &c., and the phrases "a cheerful prospect," &c., are not uncommon among ourselves. The following glosses from Hesychius are conclusive in favour of the opinion that the ideas of merriment and brightness are included in the word γελάω. Γέλαν. ἀνγὴν ἡλίου. Γελεῖν. λάμπειν, ἀνθεῖν. There is no occasion to read here *Φέλαν*, as Toup proposes (Vol. iii. pp. 400, 473), any more than in *Βέλα. ἥλιος καὶ ἀνγὴ ὑπὸ Λακώνων*, or in *Ἐλη. ἡλίου ἀνλαία ἢ ἀνγὴ* (Timæus); the γ, β, and aspirate in these words represent the digamma, as does also the σ in σέλας, σελήνη. In the word γαλήνη the leading idea is that of the sunshine or brightness which invariably accompanies fine weather in the East; the same idea of brightness accounts for the other meaning given to this word by Hesychius: *Γαλήνη. τὸ ἐπιπόλαζον ἐν τῇ μεταλλείᾳ τοῦ ἀργύρου χωνευομένου*. The idea of shining whiteness is conveyed also by the word γάλα, "milk," and by the Sicilian word γέλα (Lat. *gelus, gelu*), "frost," which according to Lennep (*ad Phalarid. Ep.* 106, p. 308) is alluded to in the following

gloss of Hesychius: *Κιέλλη. φέγγος, ἀνγή, φῶς, πᾶχνη, οὐίχλη*, where Ruhnken (*ad Tim.* p. 96) reads *βέλλη*. The reviewer of Niebuhr's *History of Rome* (quoted by Gölter, *de Situ et Origine Syracusarum*, p. 150) supposes that the Sicilian river Gela was so called from its coolness. We entertain a different opinion. When we remember that the city Gela was founded by the Rhodians (Thucyd. vi. 4), who were near enough to the Triopian promontory to be influenced by the Triopian religion; that the Triopian rites were at an early period introduced into that city (Herod. vii. 153); that one of the Triopian deities was Apollo (Herod. i. 144); that an ancestor of Gelon, one Telines of the island of Telos, was Hierophant of the Triopian rites (Herod. viii. 153), and that this office remained in the family (Böckh, *ad Schol. Pindar.* p. 314); finally, that the Athenian priest-tribe was called *Γελεόντες** (Arnold's Thucydides, Vol. i. p. 659), and that the patron god of the old Athenians was *Ἀπόλλων πατρῷος*, considered as the sun-god (*φασί τινες Ἀθηναίους αὐτόχθονας φῦναι καὶ τοῦτο γονέας ἔχειν Γῆν καὶ Ἥλιον, ὃς ὁ αὐτός ἐστιν Ἀπόλλωνι*; *Schol. in Plat. Euthydem.* p. 369 Bekker); we cannot doubt that the city and river Gela, as well as the two kings Gelo and Hiero, owed their names to their connexion with the Triopian worship of the bright sun-god. On the whole, then, *αἶ-γ-λη* = *Φά-γ-λη* or *φα-γ'έ-λη* (for the change of place in the semivowel see above, § 116, and elsewhere) is a word strongly expressive of bright, shining light, and is particularly employed to signify the sun.

460 It is worthy of remark, that, as the latter of the two elements which go to make up *αἶ-γ-λη*, refers not only to "light," but also to the sense of "seeing," as in *λάω* and *β-λέπω*; so the first part of the word expresses not only "light" or "brightness," but also "speaking" (*ῥ-μι, αἶ-νω*), and by association "hearing" (*ἀῖω*; above, p. 93). The connexion between "light" and the faculty of "seeing" is sufficiently obvious: without *φῶς* there could be no *ὄψις* (Plato, *Respub.* vi. p. 507 D). The ideas of "speaking" and "light" both belong to the more general one of manifestation. The etymological connexion of the words expressing them has been shown by A. W. Schlegel (in an article in the *Indische Bibliothek*, Vol. ii. p. 284), who has compared the Sanscrit root *bhā*, "to shine," with the Latin and Greek *fa-ri*, *φημί*, "to say." The inflexions of the latter verb, in its Doric form, are perfectly identical with those of the Sanscrit *bhā*: thus we have

* Those who read *Τελεόντες*, must remember the gloss in Hesychius, *Γέλεα, τέλεα*.

<i>bhâ-mi</i>	<i>φα-μί</i>
<i>bhâ-si</i>	<i>φα-σί</i>
<i>bhâ-ti</i>	<i>φα-τί</i>
<i>bhâ-mas</i>	<i>φα-μές</i>
<i>bhâ-tha</i>	<i>φα-τέ</i>
<i>bhâ-nti</i>	<i>φα-ντί</i>

The Greek *φαί-νω*, "to shine," bears the same relation to *φά-μι*, that *αἶ-νω* does to the Latin *aio* or the Greek *ἤμι*. In the sense "light" we have the Sanscrit *bhâs* and the Greek *φάος*. Although the root *bhâ* itself never signifies "to speak," we have with that signification the root *bhâsh*, which bears the same relation to it that *hrish* does to *hri* (above, § 288). Thus, we have *bhâshatê=loquitur*; *bhâshâ=loquela, dialectus*; *bhâ-shitam=sermo*; *bhâshyam=commentarius*; *dvi-bhâshin=bilinguis, interpres*; *abhi-bhâshâ=allocutio*; *abhi-bhâshin=alloqui solitus*, &c. A writer in *Blackwood's Mag.* Feb. 1840, p. 208, compares the following cognate words, which signify "light" and "sound" respectively:

<i>clarus</i>	<i>κλέος</i>
<i>dim</i>	<i>dumb</i>
<i>swart</i>	<i>surdus*</i>
<i>lauter</i>	<i>loud.</i>

Not altogether unconnected with this interchange of meaning we have two compounds with *διά*, one of which, though referred by its etymology to a root expressing distance or extent in space, is constantly used to denote a pealing sound, and the other, though derived from a root signifying a shout or cry, is almost invariably employed as a synonym of *μακρός*. These adjectives are *διαπρῦσιος*, connected with *διαπεράω* (see on Pindar, *Nem.* iv. 51, 52), and *διωλύμιος*, which contains the same root as *ὀλ-ολυγ-ή*. That the ideas of "loud-sounding," "heard afar off," and "exhibiting a lengthened vista to the eye," are really interchanged in these words, may be inferred from the following passages. On the one hand, we have Hom. *Il.* viii. 227, xvii. 247: *ἤϋσεν διαπρῦσιον*; Soph. *Æd. Col.* 1479: *διαπρῦσιος ὄτοβος*; Callim. *Hymn. in Del.* 258: *διαπρυσίην ὀλολυγὴν*. On the other hand, *διωλύμιος*, which Hesychius renders *ἡχοῦν ἐπὶ πολὺ*, is explained with reference to its usage meaning *ἐπὶ πολὺν διῆκον* (Timæus, *Lex. Plat.* p. 88, where see Ruhnken): and though a later

* In Pliny, *H. N.* xxxvii. 5, we find *surdus color* for "faint," "dull:" with which we may compare the meaning claimed for *ἀμβλύς*, above, § 218. So also *fusca vox* is opposed to *candida* or *canora*, and we have the phrase *infuscat ex inopinato* of the nightingale's song (Plin. *H. N.* x. 29, 43, § 82).

writer, like Libanius (Vol. iv. p. 149 Reiske: ἀνεβόησεν διωλύριον), may refer to the lengthened sound originally intended, there can be no doubt that in the old Attic writers the word is quite equivalent to the adjectives denoting merely length or extension in space: see e. g. Plat. *Theætet.* p. 162 A: μακρὰ καὶ διωλύριος φλυαρία. *Legg.* p. 890 E: μήκη κέκτεται διωλύρια.

461 In the dualism of the Greek mythology the Goddess of the Moon appears as the sister of Phœbus. Her name in connexion with this worship is σε-λή-νη, which is in fact only another form of γ-λή-νη. Compare προυσελεῖν, προυνελεῖν, and their probably original form προσφελεῖν (Buttmann, *Lexilogus*, II. p. 159). In the Latin language we have the shorter form which contains only the element λε-*F*:- compare *Lū-na*, *lū-c-s*, with σε-λή-νη, λευ-κός. We find a similar abbreviation in the Latin *lac-t-*, “milk,” i. e. “white liquid,” compared with the Greek γάλα(-κ-τ) (above, § 212). Whenever in cognate languages synonymous words exhibit the same root, sometimes with and sometimes without a prefix, we may generally conclude that the longer form is of later introduction, the additional syllable, which is generally of pronominal origin (§ 213), being prefixed for the sake of greater emphasis or distinctness. There can be no doubt, therefore, that the word β-λέπ-ω, γ-λαν-ός, which exhibit the labial and guttural elements respectively of the pronominal prefix *Fa-*, are more recent than the simpler derivatives from the root λε- or λε*F*-. There are two words of considerable interest, which contain the combined elements σε-λα or γε-λα, in a form very likely to escape detection. These are ἀσελγής and σιγαλοεῖς. The former word was derived by the older grammarians from the town of Σέλγη in Pisidia, so that ἀσέλγεια was presumed to denote the reverse of the characteristics of that town. This etymology needs no refutation; and there is not much to be said for the derivation from θέλγω, which is so confidently proposed by modern lexicographers. The word denotes excess of any kind; for it not only implies moral extravagance and outrage, but even inordinate size; thus we have Arist. *Plut.* 560: πλόνες ἀσελγῶς, “fat beyond all measure;” and Plat. *com. fragm.* 24 (II. p. 288 Meineke): κριὸς ἀσελγόνερος, “a ram with enormous horns.” But these are secondary usages, and we entertain no doubt that the primary meaning of ἀσελγής is properly given by Hesychius when he renders it ἀκόλαστος, ἀνάθαρτος the latter of these synonyms pointing to the form of σέλας, which appears in σελαγέω, “to light up, to illumine;” so that ἀσελγής primarily means “dark, dirty, foul, unclean, defiled.” This etymology is confirmed by the relation between ἀσάλλη (Hesych. ἀσάλλαν ἀμελείαν) and σαλαγεῖ (Hesych. ταράσσει· ἢ γὰρ φροντίς Σάλα λέγεται),

whence ἄσαλαγεῖν (Toup, iii. 491) = ἀφροντιστεῖν (Hesych. s. v. ἄσάλλειν). Accordingly ἄ-σελγής and σελαγ-εῖν contain really the same elements as γάλακ-τ or γλαῦκος. The other word σιγαλοεῖς is undoubtedly derived from σί-Φαλος, "the fat or grease of a hog," the first syllable being the root of σύς (above, § 222), and the rest of the word being this combination Φά-λα or γάλα. The use of σιγαλοεῖς and the compound νεο-σίγαλος (Pind. *Ol.* iii. 4) to signify generally that which is bright, glittering, glossy and shining, must be compared with that of λιπαρός, which properly speaking means "shining from being smeared over with oil," but which is used to signify "brightness" in general, as in the epithet λιπαρόμυξ, of a bright gold frontlet (above, § 456). The original meaning of the epithet was, however, quite obvious to the Greeks themselves, for Aristophanes ridicules the phrase λιπαρὸς Ἀθήνας, maintaining that the poet who used it applied to the city a compliment better suited to a jar of anchovies (ἄφύων τιμὴν περιᾶψας, *Acharn.* 640). And the older poets do not hesitate to say that "glossy tunics are shining with oil" (Hom. *Il.* xviii. 596: χιτῶνας ἦκα στίλβοντας ἐλαίῳ), or that "liquid oil trickles off the close warped linen" (*Od.* vii. 107: καιροσέων ὀθονέων ἀπολείβεται ὑγρὸν ἔλαιον), just as the Latin poets say: *ignis relucet a galea; vestes ardent*; and the like.

462 To return to the shorter form, we have the three meanings "to see," "to take," and "to wish," expressed by one word λάβω. At a subsequent period the root Φα was prefixed to that word, and different modifications of it were employed to express the same three different meanings. For the first sense "to see," we have β-λέπ-ω, γ-λανύ-σσω, and for the cognate idea of light, we have βέλα, γέλα, σέλας, and ἔλη. For the second meaning "to take," we have β-λάπ-τω, γέν-το (*Iliad.* viii. 43, xiii. 241, xviii. 476), ἐλεῖν, and for the cognate word "hand" we have θέν-αο (for the ν compare Aleman's κέν-το for κέλετο, Eustath. p. 658, 29). And for the third meaning "to wish," we have the common word θέλ-ω, which, with the θέν-αο just mentioned, bears the same relation to σέ-λας, ἐ-λεῖν, that the equally common θάλασσα does to the older form σάλασσα (Kön *ad Greg. Cor.* p. 300), and to σάλος, σαλεύω, σαλάσσω, ἄλς, &c., still used by the best writers. We think Σαλαμίν-ς, as the name of an island, is also connected with θάλασσα; so also σαλασσομέδων in Aleman's Ionics a minore:

Ἰνὼ σαλασσομέδοισ', ἂν ἀπὸ μασθῶν
ρίπτεν φάτις γαλασσηνὸν Μελικέριον.

as emended by Porson (Gaisford's *Hephæstion*, p. 337). And we may compare Σεμέλη = Θεμέλη; Welcker, *Götterlehre*, i. p. 536. The labial element of the original digamma is still preserved in the Latin *vōlo*.

463 Before we proceed to investigate the origin of *βούλομαι*, it will be proper to inquire how far, in its actual use by the best writers, it agrees with or differs from *θέλω*, or rather *ἐ-θέλω*, as the word is written by the epic poets, by Pindar, and, with the exception of phrases like *εἰ θέλεις*, by the prose writers in general.

The distinction between *ἐθέλω* and *βούλομαι*, given by Buttmann (*Lexilog.* i. p. 26), will certainly not hold any where but in Homer, and we do not believe that it obtains even there. He is quite right in his general statement that *ἐθέλειν* means "to be willing," and *βούλεσθαι*, "to wish;" that is the distinction which prevails throughout the Greek writers: in his application, however, he is not only wrong, but inconsistent. Let us turn to the first passage which he quotes from Homer; it is taken from Priam's answer to Hecuba, when she tries to dissuade him from going to ransom the dead body of Hector. At the very beginning of his speech (v. 217), he says: *μή μ' ἐθέλοντ' ἱέναι κατεργάναι*, which means "do not detain me, for I *will* go;" and in the passage quoted by Buttmann he says, "if it be destined that I die by the ships of the Greeks, I am not merely willing, it is my wish:

*ἀντίκα γάρ με κατακτείνειεν Ἀχιλλεύς
ἀγκὰς ἔλόντ' ἐμὸν υἱόν, ἐπὴν γούν ἐξ ἔρον εἶην.*

for I wish that Achilles would slay me, after I have taken my son in my arms and wept my fill." In the passage from the *Odyssey* it is not true that *βούλεται* implies a mere acquiescence in the will of others; the wise goddess Athena tells Telemachus, that it is a peculiarity of a woman to feel a strong attachment to her husband, whoever he may be, and that it is her earnest desire to further his interests as much as possible. Why the third passage was quoted we cannot see, for it so obviously means an active though fruitless desire, and has nothing to do with the *Bereitwilligkeit*—"the being ready and willing"—which he says is implied in *βούλομαι*. It certainly is somewhat remarkable that *βούλομαι* should be used by Homer in speaking of the gods, contrary to the sense of the word, and the use of all other writers. One would think that *will*, rather than *desire*, would naturally be attributed to a superior being. We must recollect, however, that Homer's gods were very second-rate personages, who might, under certain circumstances, receive wounds from mortal men; so that we need not wonder if we find desire, and all other human feelings, attributed to them. In Demosthenes, *ἀν θεὸς ἐθέλη*, "if it be the will of God," is a common phrase (see for example, *Philipp.* i. 42, and Herald. *Animadv.* ii. 5); and in *Olynth.* i. 23, he puts *ἐθέλω*, as applied to the gods, and *βούλομαι*, as applied to man, in direct opposition: *δοκεῖ δ' ἔμοιγε, ὦ ἄνδρες Ἀθηναῖοι, δεῖξιν οὐκ*

εἰς μακράν, ἂν οἱ τε θεοὶ θέλωσι καὶ ὑμεῖς βούλησθε. And so we have in Plato, *Legg.* vii. p. 799 E: εἰ θεὸς ἐθέλοι; and in *Legg.* iii. p. 688 E: ἐὰν θεὸς ἐθέλῃ. There are three passages, one in Euripides, and two in Plato, in which ἐθέλω and βούλομαι are so directly opposed, that we cannot mistake the distinction between them if we would. In the *Iphigenia in Aulide* (v. 336), Menelaus says to Agamemnon:

βούλομαι δέ σ' ἐξελέγξαι, καὶ σὺ μήτ' ὀργῆς ὕπο
ἀποτρέπου τᾷληθές, οὔτε κατατενῶ λίαν ἐγώ.
οἷσθ' ὅτ' ἐσπουδάξας ἄρχειν Δαναΐδαις πρὸς Ἴλιον,
τῷ δοκεῖν μὲν οὐχὶ χρήζων, τῷ δὲ βούλεσθαι θέλων,
κ. τ. λ.

The two passages from Plato are as follows; *Legg.* ix. p. 863 B: ἡδο-
νὴν...φαμέν...πράττειν ὅ τί περ ἂν αὐτῆς ἡ βούλησις ἐθέλῃσθαι.
Respublica, iv. p. 437 B: τί οὖν; ἦν δ' ἐγώ· διψῆν καὶ πεινῆν καὶ
ὅλως τὰς ἐπιθυμίας, καὶ αὖ τὸ ἐθέλειν καὶ τὸ βούλεσθαι, οὐ
πάντα ταῦτα εἰς ἐκεῖνά πη ἂν θείης τὰ εἶδη τὰ νῦν δὴ λεχθέντα;
οἷον αἰετὴν τὴν τοῦ ἐπιθυμοῦντος ψυχὴν οὐχὶ ἥτοι ἐφίεσθαι φήσεις
ἐκείνου οὐδ' ἂν ἐπιθυμῇ, ἢ προσάγεσθαι τοῦτο ὃ ἂν βούληται οἱ γε-
νέσθαι, ἢ αὖ, καθ' ὅσον ἐθέλει τί οἱ πορισθῆναι, ἐπινεύειν τοῦτο
πρὸς αὐτήν, ὥσπερ τινὸς ἐρωτῶντος, ἐπορεγομένην τῆς γενέσεως; In
all these three passages it is abundantly clear that βούλομαι and βού-
λησις refer to the desire or wishing for a thing, while ἐθέλω is restricted
to the mere will or willingness. In regard to θέλων ἄρχειν in the pas-
sage from Euripides, it is evident from the perfectly similar sentence in
Plato's *Politicus* (p. 299 B), that the mere willingness or acquiescence in
the office is implied: "pretending to have no desire for the office, but
in real wishes, in regard to his ambition, being perfectly willing to
undertake it." The words of Plato are οὐκοῦν ὅ γ' ἐθέλων καὶ ἐκὼν
ἐν τοῖς τοιούτοις ἄρχειν δικαίωμα' ἂν ὁτιοῦν πάσχοι καὶ ἀποτί-
ναι; where the meaning is, "he who, willingly and of his own accord,
&c.," as in the *Protagoras* (p. 335 A): ὅτι οὐκ ἐθέλῃσιν ἐκὼν εἶναι
ἀποκρινόμενος διαλέγεσθαι—"will not be willing as far as he is con-
cerned." We do not recollect one instance in the good Greek writers
in which βούλομαι and ἐθέλω are confused; they are as distinct in
meaning and origin as the German correlatives *wünschen*, which an-
swers to the former, and *wollen*, which translates the latter.

464 It is a common opinion (see Döderlein, *Syn. und Etym.* v.
56, and Passow, *s. v.* θέλω), that βούλομαι, another form of which is
βόλομαι, bears the same relation to θέλω, that *volo*, *volt*, *volebam*,
volent, do to *velle*, *velim*, and *vis* for *velis*, and that the β and θ are
interchanged like φ and θ in φήρ and θήρ, and *v* and θ in *venari*
and θηρᾶν; it is also suggested that the change from ε or ο to ου is

explained by the transition from the Italian *volere* to the French *vouloir*. It is of course easy to add a comparison of the Teutonic roots, which really correspond to *ἤελ-*, but which have generally been traced to a nearer relationship with *βούλομαι*; such are the Gothic *viljan*, A. S. *vilnian*, O. S. *willian*, O. H. G. *wellan*, N. H. G. *wollen*, Engl. *will*. If we had no other means of proving it, this word *βούλομαι* alone in its relation to *θέλω*, might serve to convince us of the uselessness of confining the functions of comparative philology to a mere juxtaposition of *primâ facie* resemblances*. On all sides, *θέλω* presents correspondences of signification to words containing the root *ἤελ-*, with which, we have seen, it has an obvious etymological connexion; whereas *βούλ-ομαι*, with its two labials and heavier vowel *ο*, is no less distinct etymologically from the root *ἤελ-*, than it is different in signification from the verb *θέλω*. And first, let us consider the lengthened form *ἐθέλω*. It is a well-known fact, that, in the Greek language, the oldest verbs were very frequently reduplicated forms of those in

* The comparison of *βούλομαι* with these Teutonic roots and with *volo*, and the reference of *θέλω* to a forced Sanscrit affinity, which we find in Benfey's voluminous work (*Wurzelllexicon*, Berlin 1839—42, i. 320, ii. 328, 350), supply an illustration of the total want of any thing like a real insight into the structure of language which that author everywhere displays. It is not to be denied that his industry has been very great, and that he has collected an enormous mass of crude materials; we hear too, from our German friends, that he is a very good Sanscrit scholar; but he exhibits no acquaintance with the higher departments of classical learning, and he deals with the Greek words as if there were no means of distinguishing between the root and the formative affix. To take one example; the interesting word *ῥάκινθος* is referred to the root *ῥ*="to bring forth," and the last part confidently is identified with *ἄνθος* ("der letzte Theil des Wortes ist ohne allen Zweifel *ἄνθος*:" i. p. 413). Now there are many purely Greek words ending in *-νθος*, which is merely a formative affix of pronominal origin (above, § 263). The first part of the word is therefore *ῥακ-* as in the Latin *vac-cinium*; and we recognise this in the root of *ῥακ-ίζω* (= *ῥερίζω*, Hesych.), and in a number of Teutonic roots signifying softness or pliability, e. g. *weiche*, A. S. *wake*, &c. We are sure, as in the case of the cognate *Iris*, that the plant derives its name from the mythological personage. Now Benfey himself has seen that *ῥίγης*=*ῥίγης* means primarily the *curved* rainbow (ii. 302), and it is equally certain to us that in the old elementary religion of the Laconians, from which the legend of *Hyacinthus* is derived (see Müller, *Dor.* i. p. 374, who however derives the name from the flower), the beautiful youth slain by the *discus* of Apollo is merely a type of the rainy spring, whose tender flowers are wet with the moisture of heaven, and which falls a victim to the powerful *orb* of the sun-god. So that the *Iris* or "rainbow" and the *Hyacinthus* or "watery flower" are equally symbolic of the triumphs of the great God of day. If this interpretation is correct, and if the explanation of *ῥάκινθος* is a fair specimen of the *Wurzelllexicon* (and we think that it is), what is the use of the book, except to show that classical scholarship is still the best and safest basis of operations for the general philologist?

common use. Now, it has been observed, that a number of verbs, which in the oldest state of the language were digammated, also in the old language appear with an initial ϵ in the present tense (for example, $\epsilon\lambda\delta\omicron\mu\alpha\iota$, $\epsilon\lambda\pi\omicron\mu\alpha\iota$, $\epsilon\acute{\epsilon}\rho\gamma\omega$, $\epsilon\iota\delta\acute{\omicron}\mu\epsilon\nu\omicron\varsigma$, $\epsilon\acute{\iota}\sigma\kappa\omega$; Buttman's *Ausführl. Sprl.* § 112, *Anm.* 23); which is merely a mutilated reduplication (Buttmann, § 82, 3, note). To this class we refer $\epsilon\theta\acute{\epsilon}\lambda\omega$ = $\epsilon\acute{\epsilon}\phi\acute{\epsilon}\lambda\omega$, and consider it, on the principle mentioned just before, as standing for the reduplicated form $\phi\epsilon\phi\epsilon\lambda\omega$. The only difference, in fact, between $\epsilon\theta\acute{\epsilon}\lambda\omega$ and $\epsilon\lambda\delta\omicron\mu\alpha\iota$ is, that $\epsilon\theta\acute{\epsilon}\lambda\omega$ has lost only one digamma, and $\epsilon\lambda\delta\omicron\mu\alpha\iota$ has lost both; the preservation of the one digamma in $\epsilon\theta\acute{\epsilon}\lambda\omega$ is due, we conceive, to the very common occurrence of the word from the earliest times.

Again, no one can doubt that $\epsilon\lambda\epsilon\acute{\iota}\nu$ and $\epsilon\lambda\kappa\epsilon\iota\nu$ are connected. That such is the case is obvious from a comparison of the glosses $\Gamma\acute{\epsilon}\lambda\lambda\alpha\iota$, $\tau\acute{\iota}\lambda\alpha\iota$; $\epsilon\lambda\lambda\acute{\iota}\zeta\omega\nu$, $\tau\acute{\iota}\lambda\lambda\omega\nu$ (Hesychius); and the Latin *vello* (all which bear the sense of $\epsilon\lambda\kappa\epsilon\iota\nu$), with the common uses of $\epsilon\lambda\epsilon\acute{\iota}\nu$. The connexion of $\epsilon\lambda\kappa\epsilon\iota\nu$ with $\eta\lambda\alpha\kappa\acute{\alpha}\tau\eta$ is acknowledged by every one who has read Buttman's paper on the $\eta\lambda\epsilon\kappa\tau\rho\omicron\nu$ (compare $\kappa\acute{\tau}\epsilon\nu\epsilon\varsigma$ $\epsilon\lambda\kappa\eta\tau\eta\rho\epsilon\varsigma$, Phanias, *Ep.* 4, 5). Now Hesychius has the following glosses: $\Gamma\acute{\epsilon}\lambda\gamma\eta$ · δ $\rho\acute{\omega}\pi\omicron\varsigma$ $\kappa\alpha\acute{\iota}$ $\beta\acute{\alpha}\mu\mu\alpha\tau\alpha$, $\acute{\alpha}\tau\rho\alpha\kappa\tau\omicron\iota$ $\kappa\alpha\acute{\iota}$ $\kappa\acute{\tau}\epsilon\nu\epsilon\varsigma$ (on the first part see Toup, *Emendationes*, iv. p. 106); $\Gamma\acute{\epsilon}\lambda\gamma\iota\alpha$. $\pi\acute{\iota}\nu\eta$. $\sigma\pi\acute{\alpha}\theta\eta$. $\kappa\omicron\nu\rho\acute{\omicron}\lambda\iota\alpha$. From these we infer that there were other words connected with weaving and spinning also derived from $\epsilon\lambda\kappa\omega$: for the change of the κ into γ is hardly worth noticing. Besides all this, we have the common word $\theta\acute{\epsilon}\lambda\gamma\omega$, the primary signification of which is "to enchant," "to act upon by charms." That in this sense it was nothing more than a synonym for $\epsilon\lambda\kappa\omega$ appears from the following considerations. The principal instrument in magic among the Greeks, especially for love-charms, was the wry-neck, $\zeta\acute{\iota}\gamma\gamma\acute{\iota}\varsigma$, a little bird which, when fastened to a metal wheel and turned round like an $\acute{\alpha}\tau\rho\alpha\kappa\tau\omicron\varsigma$, was thought to have a $\delta\acute{\upsilon}\nu\alpha\mu\iota\varsigma$ $\epsilon\lambda\kappa\tau\iota\kappa\acute{\eta}$. Thus Pindar says (*Nem.* iv. 35): $\zeta\acute{\iota}\gamma\gamma\iota$ δ' $\epsilon\lambda\kappa\omicron\mu\alpha\iota$ $\eta\tau\omicron\rho$ $\nu\omicron\upsilon\mu\eta\nu\acute{\iota}\alpha$ $\theta\iota\nu\acute{\epsilon}\mu\epsilon\nu$, and Theocritus, ii. 17: $\zeta\acute{\iota}\gamma\gamma\acute{\iota}$, $\epsilon\lambda\kappa\epsilon$ $\tau\acute{\upsilon}$ $\tau\eta\nu\omicron\nu$ $\epsilon\mu\acute{\omicron}\nu$ $\pi\omicron\tau\acute{\iota}$ $\delta\acute{\omega}\mu\alpha$ $\tau\acute{\omicron}\nu$ $\acute{\alpha}\nu\theta\rho\alpha$. Conversely, we find $\epsilon\lambda\kappa\epsilon\iota\nu$ $\zeta\acute{\iota}\gamma\gamma\alpha$ $\epsilon\pi\acute{\iota}$ $\tau\iota\nu\iota$, and the word $\epsilon\lambda\kappa\epsilon\iota\nu$ is sometimes used absolutely for "to entice," just like $\theta\acute{\epsilon}\lambda\gamma\omega$. Thus we have in Philostratus, *Imagg.* i. 4, p. 769: $\acute{\alpha}\sigma\pi\acute{\alpha}\zeta\epsilon\tau\alpha\iota$ $\tau\acute{\omicron}\nu$ $\theta\acute{\alpha}\nu\alpha\tau\omicron\nu$ $\kappa\alpha\lambda\tilde{\omega}$ $\kappa\alpha\acute{\iota}$ $\eta\delta\epsilon\acute{\iota}$ $\tau\tilde{\omega}$ $\acute{\omicron}\mu\alpha\tau\iota$ $\kappa\alpha\acute{\iota}$ $\omicron\acute{\iota}\omicron\nu$ $\acute{\upsilon}\pi\nu\omicron\nu$ $\epsilon\lambda\kappa\omicron\nu\tau\iota$. This passage is quoted by Jacobs, *Anth. Pal.* iii. p. 664, in a note on the words of Philippus:

$\acute{\omicron}\varsigma$ $\epsilon\pi\iota\pi\epsilon\rho\kappa\acute{\alpha}\zeta\epsilon\iota\varsigma$ $\mu\iota\alpha\rho\tilde{\alpha}$ $\tau\rho\iota\chi\acute{\iota}$, $\nu\tilde{\upsilon}\nu$ $\phi\acute{\iota}\lambda\omicron\nu$ $\epsilon\lambda\kappa\omega\nu$,
 $\tau\eta\nu$ $\kappa\alpha\lambda\acute{\alpha}\mu\eta\nu$ $\delta\omega\rho\tilde{\eta}$, $\delta\omicron\upsilon\varsigma$ $\epsilon\tau\acute{\epsilon}\rho\omicron\iota\varsigma$ $\tau\acute{\omicron}$ $\theta\acute{\epsilon}\rho\omicron\varsigma$.

He also cites Lysias, *de Eratosth. Cæde*, p. 191 Bekker, where $\epsilon\acute{\iota}\lambda\kappa\epsilon\varsigma$ bears a different meaning, i. e. that of the Latin *vellicare*. We have

the verb ἔλκω in connexion with πείθω in Plato, *Resp.* v. p. 458 D, and with this verb and κολακεύω in VII. p. 583 D: οὐκοῦν καὶ ἄλλα ἐναντία τούτων ἐπιτηδεύματα ἡδονὰς ἔχοντα, ἃ κολακεύει μὲν ἡμῶν τὴν ψυχὴν καὶ ἔλκει ἐφ' ἑαυτά, πείθει δ' οὐ τοὺς καὶ ὀπιοῦν μετρίους. That this primary notion of θέλγω and ἔλκω was connected with the idea of ἐλεῖν, βαλεῖν, is shown by the τῇ σῇ ληφθέντες ὕγγυ of Aristophanes (*Lysistr.* 1110), where Pindar would have written ἐλκόμενοι. The relation between θέλγειν and ἔλκειν is farther shown by a comparison of the forms θέλγητρον and ἔλκηθρον, θελκτικός and ἐλκτικός, θελκτήρ and ἐλκτής.

465 We must also say something of the adjective θέλεμος, which occurs only in the following passage of Æschylus (*Suppl.* 1006):

ποταμοὺς δ', οἳ διὰ χώρας
 θέλεμον πῶμα χέουσιν,
 πολύτεκνοι, λιπαροῖς χεύ-
 μασι γαίᾳς
 τόδε μειλίσσοντες οὔδας,

where the Chorus is not speaking of the Nile (as Passow supposes), but of the rivers of Argolis, in opposition to the river of Egypt. The glosses of Hesychius are (1) θέλεμον. οἰκτρόν. ἡσύχον. (2) θελέμω. ἡσύχως. οἰκτρώς. (3) θελερόν. θελκτόν, καὶ τὸ θέλγον τὰ ὄμματα ἐπὶ κακώσει. In the first two, we must substitute φίλιον, φιλίως, for οἰκτρόν, οἰκτρώς, just as θέλγητρον ("errore pro θέλκητρον," Pors. not. MS.) is afterwards rendered φίλτρον. The third gloss is also corrupt: we must read θέλκητρον, θελκτόν, &c. The other meaning, ἡσύχον, is clearly that borne by θέλεμον in the passage of Æschylus; this sense has been derived from θέλω in much the same way as that of ἔκηλος from ἐκών, which we pointed out before (above, § 273): the word can hardly be compared with γῇ ἐθέλουσα and *volentia rura*, quoted from Xenophon (*Econ.* v. 12) and Virgil (*Georg.* ii. 500) by Toup (*Emend. in Suid.* i. p. 285).

466 We believe, then, that βούλομαι has no etymological connexion with ἐθέλω. This at least we consider certain, whatever may be thought of the derivation we are about to propose for the former word. Every student is aware that there are many words in the Greek language which begin with the syllable βου-. In most of these words it is customary to explain this prefix from a gloss in Hesychius: Βοῦ. τὸ μέγα καὶ πολὺν δηλοῖ. Λάκωνες. Thus βουλμία is translated "violent hunger," βούπαις, "a big boy." We remark, in the first place, that Hesychius assigns this prefix to the Laconians.

We attach no weight to the etymological guess-work of Plutarch (*Sympos.* VI. 8): τὸ μὲν οὖν βούλιμον ἐδόκει μέγαν ἢ δημόσιον ἀποσημαίνειν καὶ μάλιστα παρ' ἡμῖν τοῖς Αἰολεῦσι ἀντὶ τοῦ β τῷ π χρωμένοις· οὐ γὰρ βούλιμον, ἀλλὰ πούλιμον οἶον πολύλιμον πάσαι ὀνομάζομεν. We believe that Hesychius had some good reason for attributing this prefix to the Laconians; what this reason was we will endeavour to show. The Spartan youth were divided into classes, which bore the same names as their flocks and herds, that is, were called after the first objects of classification in a primitive state. The larger divisions were termed ἀγέλαι, a word generally applied to herds of oxen; the smaller ἱλαί, a word in its ordinary acceptation denoting a troop of horse. There are two analogous adverbs corresponding to these two words, ἀγεληδόν and ἱλαδον, both used by very old writers. Now it appears that in Sparta the ἀγέλη was called βοῦα (=ἀγέλη παιδων Hesych.); and its chief was termed βουάρορ (=ἀγελάρχης, ὁ τῆς ἀγέλης ἄρχων παῖς. Λάκωνες. Hesych.). From the form βαγός, which is found in Laconian inscriptions, Böckh is disposed to infer that the *v* of βουάρορ, which is also written βοαγός, represents the initial digamma of the termination (*Corpus Inscript.* Vol. I. p. 612). It appears to us, from the form βοῦα, that the digamma must have belonged to the first part of the compound. There are two other words referring immediately to this political division: Βουόα. ἀγέλη—τετάχαθ αἱ βοῦαί. ἀντὶ τοῦ βουσόαι κ.τ.λ. *Etym. Magn.*, according to the admirable emendation of Hemsterhuis; and συμβοναδεῖ. ὑπερμαχεῖ. Λάκωνες (Hesychius). It will not be denied that the syllable βον- in these words is the element of βοῦς. If so, the name given in Sparta to a body of young men was literally the same as that borne by a herd of oxen. The connexion of βοφή, “the war-shout,” with βοῦς and βοφίς, has been mentioned above. We have here a transition from agricultural to political ideas, just as the step in that case was from agriculture to war. We have endeavoured to show on a former occasion that military arrangements were the basis of all the organization of a Doric state, so that the transition is the same in both cases. It might be asked whether the word συμβοναδεῖ means “to shout together,” from the one meaning, or “to herd together,” from the other; from whichever of the two meanings it is derived, it is evidently a synonym for βοηθεῖ, and as such is a striking confirmation of the supposition, that the digamma appeared in βοφή. We recognise the same meaning in βουγάιος=βοφή-γάις, “delighting in battle.” That the first syllable of βούβρωστις and βούπηρστις refers to cattle is generally acknowledged, and the same connexion with βοῦς is admitted in βούχιλος λευμάν (*Æsch. Suppl.* 540), compared with the ἐππομανῆς λευμάν of Soph. *Aj.* 143. A βούπαις was a boy of the βοῦα, or “of

the herd." Now when we reflect that the Æolian form of βούλη was βόλλη(τῆη βούλης ὑπὸ Αἰολέων βόλλας προσαγορευομένης, Plutarch, *Quæst. Rom.* p. 228), when we call to mind that we have in old Latin both *boo* and *bovo*, both *boarius* and *bovarius*, both *boatim* and *bovatim*, and that there were two old towns on the Appian way, i. e. in the midst of the old Pelasgian population of Italy, one called *Bola*, the other *Bovillæ*, and that *bovile* is the old Latin for an ox-stall, we can hardly refuse to adopt an explanation of βούλη, which, while it accounts for βόλομαι as well as βούλομαι, is consistent and intelligible in every other respect. Only suppose that βούλη means an assembly, that it is another form of βοῦα, which we have seen applied to men, and we have every point about βούλομαι satisfactorily explained. It may be asked, How can a word which means an assembly come to signify "a desire of the mind"? We might just as well ask, why ἀγών, the primary meaning of which is a place of assembly (for example, *Iliad* vii. 298), afterwards came to signify not only the assembly itself, but the object of a particular kind of assembly (public games); also a fit and proper time for any thing (see Valckenaer *ad Phœniss.* 591); and, finally, the violent emotions of an agitated mind (Thucyd. vii. 71); or, to take a case exactly in point, it might as well be asked why *consilium*, which originally meant nothing but a coming together just as *exsilium* means a going out, should not merely signify an assembly of men who have come together to deliberate, but also bear every other sense of βουλή. This derivation explains a great many peculiarities about the word βούλομαι. In the first place, it shows us why it is a deponent verb, why it has no active form. We think it scarcely necessary to mention, that βούλη is antecedent to the verb: βούλομαι, therefore, is properly "I am one of a βουλή," i. e. βουλεύω, save that βουλεύω always expresses a more decided, deliberate purpose than βούλομαι, which, in its original sense, perhaps bore the same relation to βουλεύω that the deponent *consilior* does to the active *consulo*.

467 From such a noun as βουλή one would expect to have a verb βουλάω, as from τιμή, τιμάω, and indeed we find traces of such a verb in all the tenses but the present;—thus we have βουλήσομαι, βεβούλημαι, ἡβουλήθην. The same sort of expectation is entertained and justified with regard to ἐθέλω, the oldest form of which (as we have rendered probable) is *Felew*: for we have ἐθέλήσω, ἡθέλησα. We believe the loss of the derivation-syllable to have been occasioned by the very common use of the present tense of both verbs; it is this tense alone that is employed as a mere auxiliary. With regard to the peculiarity in the augment of the aorist ἡβουλήθην, we think Buttmann's

explanation is satisfactory. He observes (*ad Plat. Georgiam ed Hein. dorf.* p. 522), that, in verbs of cognate signification, we find analogous irregularities of form: thus we have the curious futures ἔδομαι and πίομαι, the futures formed by the diphthong εν from verbs in εω, as δέυσω, χεύσω, νέυσω, &c., and the anomalous infinitives κνῆσθαι and ψῆν; thus also the verbs βούλομαι, δύναμαι, and μέλλω, which he remarks (*Ausführl. Sprl.* §. 83, *Anm.* 8, note), have something analogous in their signification, make ἡβουλόμην, ἡβουλήθην, ἡδυνάμην, ἡδυνήθην, ἡμέλλον: and he conjectures that the augment may have been suggested by the sound of ἡθέλον, which is also connected with them in meaning.

468 The use of βου- as an intensive prefix may be compared with that of ἱπο- in ἱππόκορημος, ἱππομάραθρον, ἱπποσέλινον, ἱπποτυφία, ἱππόπορος. The same idea of weight or strength is conveyed by the word βούς in the proverb βούς ἐπὶ γλώσσει, as indeed appears clearly from the words κρατερῶ ποδὶ in Theognis (815), and the epithet μέγας, which is joined to it in Æschylus (*Agamemnon*, 36).

469 That the word βουνός was a strange and unusual one, appears from the explanation which Herodotus (iv. 199) thinks proper to give of it, and, indeed, from the express statement of Phrynichus (p. 355 Lobeck). Herodotus considers it a Cyrenæan word: τῶν ὑπερθαλασσιδίων χώρων τὰ μέσα, τὰ βουνούς καλέουσι. Valckenaer thinks (*ad Herod.* iv. 158), that it was taken by the Dorians to Sicily, and learned there by Æschylus, but from the manner in which it is introduced by this poet (*Supplices*, 101) we have no doubt that he considered it an African word, and used it as such, because his chorus consisted of African damsels. The passage, which is almost hopelessly corrupt, stands thus in the MSS.: ἰλέομαι μὲν Ἀπίαν βοῦνιν, καρβᾶνα δ' αὐδὰν εὐγα κοννὺς πολλακιδ' ἐμπιτνῶ ξὺν λακίδι. As we cannot believe that the second person of a verb would be inserted in the adversative clause to ἰλέομαι μὲν, and before ἐμπιτνῶ, which is the legitimate antithesis, and as the last two syllables of πολ-λακιδ' seem to be suggested by the λακίδι which follows, to say nothing of the feebleness of such a particle as πολλακὺς in a sentence expressing the visible act of the suppliants, we would read and arrange the passage as follows:

ἰλέομαι μὲν Ἀπίαν βοῦνιν,
καρβᾶνα δ' αὐδὰν εὐάκοον
εἰς πόλιν χέουσ' ἐμπιτνῶ ξὺν λακίδι
λίνοισιν ἢ Σιδονίᾳ καλύπτρα.

In inscriptions we find εὐήκοος as an epithet of protecting deities (Böckh, *C. I.* ii. p. 422). For the phrase χέουσ' αὐδάν, we may compare

Sept. c. Theb. 73: φθόγγον χέουσαν. *Suppl.* 626: εὐκταῖα χεούσας; and for εἰς πόλιν χέουσα we have *Agam.* 230: εἰς πέδον χέουσα; and the whole passage, thus altered, will be strictly parallel to *Pers.* 120: μὴ πόλις πύθεται καὶ τὸ Κίσσιον πόλισμ' ἀντίδουπον ἔσεται, ὁά, τοῦτ' ἔπος [this καρβᾶνα αὐδάν, i.e. ὁά] γυναικοπληθῆς ὄμιλος ἀπύων, βυσσίνους δ' ἐν πέπλοις πέσῃ λακίς. But though the Cyrenæans may have been remarkable for their use of the word βοῦνις, it was rightly referred to a Greek origin by the old grammarians. Thus we find in the *Etymologicum Magnum*: Βοῦνις καὶ βουνῦτις, ἡ γῆ· ἔρρηται δὲ παρὰ τοὺς βουνούς· βουνοὶ δὲ εἰσιν οἱ ὑψηλοὶ καὶ ὀρώδεις καὶ γεώλοφοι τόποι. παρὰ τὸ βαίνειν ἔνω. Though we take the liberty of setting aside this etymology, we still think that the origin of this word is to be sought in the Greek language. If it means, as appears from all the grammarians, an elevation, it may be compared with the German *Bühne*. We are inclined to believe that its real origin may be derived from a comparison of the following glosses in Hesychius; (1) Βουνίς. γῆ. Αἰσχύλος, (2) Βουνός. στιβάς. Κύπριοι. (3) Βουνοί. βωμοί. (4) Βούλακα. βόλου ὄνομα (read βώλου with Toup, *Emendat.* vi. p. 30 and 274). (5) Βωμώ. οὕτως ἡ Μάκρης ὠνομάζετο. (6) Βωθεῖν, διμλεῖν. βοηθεῖν. (7) Βῶλαξ. βῶλος. γῆ. (8) Βωλόναι. οἱ μὲν κολώνας. οἱ δὲ, τὸ Κίλλαον ἐκούουσι, δια τὸ ἀνακεχῶσθαι, παρὰ Σοφοκλεῖ. (9) Βῶλοι. γῆ. (10) Βωλώρχα. τὴν σῦν. Λάκωνες. (11) Βωμιῆς. οἱ περὶ τοὺς Βωμούς καλουμένους λόφους οἰκοῦντες. (12) Βῶν. βοῦν. ὄπλον. (13) Βωνίτας. τοὺς ἐν ἀργῷ, οἱ δὲ βουκόλους, ἢ ἀγροίκους. (14) Βῶς. ἀσπίς. πέλτη. βύρσα. (15) Βῶσομαι. βοήσομαι. ἐπικαλέσομαι. (16) Βωστῆρες. νομεῖς. (17) Βωστρεῖν. βοᾶν. καλεῖν. ἐπικαλεῖσθαι. From (1) we learn that βουνίς denotes "the earth" in general; from (2) that βουνός means a heap of straw, for instance, litter for an ox; from (7), (9) and (10), that βῶλος is a synonym for βουνίς in the sense of γῆ, particularly among the *Laconians* (10); from a comparison of (1) with (13), and of (4) with (7), we see that βουνίς may be written βωνίς, and conversely βῶλαξ may be written βούλαξ; from (3) we see that βωμός is a synonym from βουνός; from (8) and (11) we infer that βῶλος and βωμός may be translated, the one κολώνη, the other λόφος: now it so happens that both these words are used by Eustathius (*ad Iliad.* λ', p. 880) to explain βουνός; he says: ἡ δὲ κολώνη καὶ λόφος ἂν λέγοιτο καὶ βουνός, ὅπερ Ἡρόδοτος μὲν Αἰβύων λέξιν εἶναι φησιν, Αἴλιος δὲ Διονύσιος λέγει ὅτι Φιλήμων ἐπισκώπτει τὸ ὄνομα ὡς βάμβαρον, λόφον γὰρ καλοῦσι; from (5) it appears that the island of Eubœa, which is signified by ἡ Μάκρης (*Strabo*, p. 445) was called Βωμώ: now we know that the name Εὐβοῖα was connected with βοῦς, either on account of its pastures or from the myth about Io: τάχα δ' ὥσπερ βοὸς αὐτὴ λέγεται τι ἄντρον ἐν τῇ πρὸς Αἰγαῖον τετραμμένη

παραλίᾳ ὅπου τὴν Ἴω τεκεῖν φασὶν Ἐπαφρον, καὶ ἡ νῆσος ἀπὸ τῆς αὐτῆς αἰτίας ἔσχε τοῦτο τοῦνομα (Strabo, p. 445), and Πολύβοια is an epithet of Ceres (see Lobeck, *Paralip.* p. 465); from (12), (13), (16) we observe that βῶς is a form of βοῦς; from (6) we see that βωθεῖν may stand as well for βουαδεῖν=δμιλεῖν as for βοηθεῖν; and from (6), (15) and (17), we discover that the Laconians could contract βοη- into βω-.

470 We think that, after this comparison, no doubt ought to remain upon our minds as to the Greek origin of βοννός, as to its connexion with βοῦς, and as to its affinity with βωμός and βώλαξ. We would, in addition, point out that the connexion between the land and the cattle, which are used for tilling it, is immediate. There is indeed reason to believe that in the oldest languages of the Indo-Germanic family, the names of the cow and the earth are commutable, the latter being derived from the former, which was the symbol of fruitfulness and agriculture. (See the *Indische Bibliothek*, II. p. 288, and Bopp's *Glossar. Sanscrit.* p. 109, *ed. alter.*). The Sanscrit *gô*, nominative *gau-s* (masculine and feminine), signifies "a bull" or "a cow." In the feminine it also denotes "the earth." There is another Sanscrit word, *bhû-s*, which is confined to the latter meaning. Now it is singular, that while the Sanscrit *gô*, old Latin *ceva* (the name for "a cow" at Altinum on the Adriatic, Columella, VI. 24), Persian *ku*, Frankish *chuo*, and Anglo-Saxon *cû*, all meaning "a cow," agree with one of the Sanscrit names for "the earth," the Greek βοῦς and the Latin *bôs* perfectly coincide with the other. Thus, to take the cases which correspond in the three languages, we have

Nom.	<i>bhûs</i>	βοῦς	<i>bôs</i>
Gen.	<i>bhuvās</i>	βοτρός	<i>bovis</i>
Dative and	<i>bhuvê</i>	βοτρί	<i>bovi</i>
Locative }	<i>bhuvî</i>		abl. <i>bove</i>
Accus.	<i>bhuvam</i>	βοῦν (for βόταν)	<i>bovem</i>

It is also remarkable that γῆ, Doric γᾶ, the common name for "the earth," coincides with the other Sanscrit name for the earth, which also signifies "a cow*." As the nominative of the latter word is *gaus*, we should expect *gavam* in the accusative; whereas we have *gâm* or *gañ*, which is identical with the Doric accusative γᾶν. The Greek student will recollect that there is a longer as well as a shorter form of the Greek word for "the earth," namely, γαῖα as well as γῆ. Lastly, it should also be mentioned, that the Germans have *Gau*, "country," by

* On the connexion between the earth and the cow-horned virgin Io, see Mr. Scott's ingenious essay in the *Classical Museum*, No. 12, pp. 166 sqq.; and compare Mr. Paley's preface to his edition of the *Supplices* of Æschylus, 1851, p. vii.

the side of *Kuh*, "cow," and that our Saxon ancestors spoke of a "*hide* of land*." It has been mentioned above (§ 284) that βούς in itself means "the bellowing or lowing animal," and is therefore immediately connected with βοή, βοάω. In the same way, we may compare *gau-s* with γοάω and the Hebrew מִגִּירָה, *mugire*, "to low like an ox" (1 *Sam.* vi. 12; *Job* vi. 5). But although there can be no doubt as to the connexion of βούς and βοή, βοάω, it must be remarked that the verb was used to express sounds which we consider very different from the lowing of an ox or the battle-shout of a warrior. Thus the serpent is said to utter a βοή, *Æsch. Sept. c. Theb.* 365: μεσημβριναῖς κλαγγαῖσιν ὥς δρῶκων βοῇ. *Pind. Ol.* viii. 40: εἰς (τῶν δρακόντων) ἐσόρουσε βοάσαις; and so of the goose, *Diog. Laert.* ii. 36: οὐ καὶ σύ, ἔφη, χηνῶν βοώντων ἀνέχῃ; *Pindar* also uses βοή indifferently for the notes of the pipe (*Nem.* v. 38), the flute (*Ol.* iii. 8), or the lyre (*Pyth.* x. 39).

471 The word θυμός is particularly interesting from its use in the *Republic* of Plato. It will be recollected that Plato, and Hooker after him, consider the mind as performing the three distinct functions, reasoning, willing, and desiring; Plato divides the mind into three independent faculties, by which these functions are performed, namely, λόγος or λογισμός, θυμός, and ἐπιθυμία (*Respubl.* iv. p. 439 D), the first belonging to the τὸ λογιστικόν, or rational part of the soul, the last two to the τὸ ἄλογον, or irrational part. The θυμός or τὸ θυμοειδές, however, is not identical with the ἐπιθυμία, though it is classed with it under the same general head, for it often contradicts it, and assists the reason in governing its unruly attempts to lead man into the wrong path: οὐκοῦν καὶ ἄλλοθι, ἔφη, πολλαχοῦ αἰσθανόμεθα, ὅταν βιάζωνται τινα παρὰ τὸν λογισμὸν ἐπιθυμίαι, λοιδοροῦντά τε αὐτὸν καὶ θυμούμενον τῷ βιαζομένῳ ἐν αὐτῷ, καὶ ὥσπερ δυοῖν διασίζοντοιν ξύμμαχον τῷ λόγῳ γιγνόμενον τὸν θυμὸν τοῦ τοιούτου (*Plat. u. s.* p. 440 A);—τῷ θυμοειδεῖ προσήκει ὑπηκόω εἶναι καὶ ξυμμάχῳ τούτου (τοῦ λογιστικοῦ) (*Ibid.* p. 441 E). We translate the word θυμός, "the will," because this term conveys to our minds the idea which, in this passage, Plato evidently attached to the word he made use of; Hooker, too, translates it "will," and Hemsterhuis the younger, *la velléité* (see also Heber, *Bampton Lectures*, p. 178). It seems, indeed, that Plato thought he was using the word in a somewhat unusual signification; the first of the passages we have just quoted implies that, in his opinion, "anger" was the primary meaning of the word,

* It is a remarkable circumstance that the legend of the *Dun-cow* has arisen from a confusion with the *Dena-go*, "Danish district" (cf. *Dun-church*, &c.), conquered by the Anglo-Saxons; *Cambridge Essays*, 1856, p. 54.

as indeed is evident from his etymology in the *Cratylus* (p. 419 E): *θυμός* ἀπὸ τῆς θύσεως καὶ ξέσεως τῆς ψυχῆς ἔχει ἀν τοῦτο τὸ ὄνομα; and from the *Timæus* (p. 70 B): ὅτε ξέσειε τὸ τοῦ θυμοῦ μένος; he also uses the word to signify disposition in general, as appears from *Legg.* v. p. 731 B: τοῦτο ἄνευ θυμοῦ γενναίου ψυχῇ πᾶσα ἀδύνατος δρᾶν, and such is the usual and oldest meaning borne by *θυμός*. The meaning "anger," though certainly often conveyed by *θυμός*, and always by *θυμοῦμαι*, appears to be quite a secondary one, and we can only explain Plato's addition of the participles *λοιδοροῦντα* and *θυμούμενον*, as an exegesis of *θυμός*, by supposing that, in his abstract way of considering verbs before substantives, he got into a habit of deceiving himself with the belief that the former necessarily preceded the latter, and that *θυμός* actually derived its primary meaning from *θυμοῦναι*. This was far from being the case; indeed *θυμός* was a most proper word for his purpose, and, if it had been understood according to its old usage, he needed no addition to qualify it for the signification of "will," with which we find it used in the *Republic*. That this was its meaning in Homer, we see from the phrases, *θυμός* ἀνώγει, *κελεύει*, *κέλεται* με, *ἤθελε* or *θυμῷ ἤθελε*, like *ἔτεο θυμῷ* (Herod. v. 59); and indeed this signification of *θυμός* is sufficiently clear from the word *ἐπιθυμία*, which Plato employs in opposition to it: *ἐπιθυμία* means "a setting one's mind upon a thing," "directing one's wishes to it," quite in accordance with the old sense of *θυμός*.

472 We may settle the etymology of this word without any difficulty: at the same time we will endeavour to decide some troublesome questions which have been started regarding certain words of the same family with *θυμός*. That the ideas of placing and being placed, of *setting* and *sitting*, *sedare* and *sedere*, are intimately connected, will, of course, be at once conceded; and we hope that those who are inclined to adopt what has been said about the influence of suggestion by contrast on the formation of words, will be willing to allow that words significant of remaining and moving may have a common origin: if instances are required we may compare *μένω*, *μνήμη*, *μένος*, *mens*, *maneo*, with *μάω*=*μέν-ω*, *μέμαα*=*μέμονα*, *αὐτόματος*=*αὐτόμεντος*, &c. The affinity of these forms is clear from *ἐ-γεν-όμην*, *γένεα*, and *γένονα* (above, § 114). The relation between *μέν-ω* and *μέλ-λω* (for *μέλ-γω*) is the same as that which subsists between *κέν-το* and *κέλ-ετο*, between *γέν-το* and *ἔλ-ετο*, &c. That *μέν-ω* agrees with its other form *μά-ω* in expressing an expectation of, or a mental impulse towards, any object, as well as the meaning of fixity or continuance, which it generally bears, will appear from the following passages. Homer, *Iliad* xv. 599:

τὸ γὰρ μένε μητιέτα Ζεὺς
 νηὸς καιομένης σέλας ὀφθαλμοῖσι ἰδέσθαι.

Sophocles, *Philoct.* 511:

ἐγὼ μὲν
 ἔνθαπερ ἐπιμέμονεν

ἐπ' εὐστόλου ταχείας νεὼς πορεύεσθαι ἂν ἐς δόμους.

And the idea of remaining or abiding may be conveyed by forms which have lost all traces of the original suffix *ν-*: as in Æschylus, *Choëph.* 464, where we ought to read with Butler:

δῶμασιν ἔμμοτον
 τοῖσδ' ἄγος, οὐδ' ὑπ' ἄλλων
 ἔκτοθεν, ἀλλ' ὑπ' αὐτῶν
 αἰῶν' ἀναιρεῖν.

That the form *ἔμμοτος*, which has nothing to do with *μότος*, "lint," really belongs to this class of words, is clear from the antistrophic *ἄμμοτον*, which is constantly used with words containing this root, as *μεμάσσι*, *μεμαῶς*, &c. The most difficult word into which this root enters is perhaps the adjective *ἀμαιμάκετος*, of which Götting (*ad Hesiod. Theog.* 319) and Lobeck (*Pathol.* p. 374) have proposed erroneous derivations, the former connecting it with *μάχουμαι*, and the latter supposing that it is for *ἀμαίμακτος*, as *ἀλάμπετος* for *ἄλαμπτος*, with the intensive *ἀ-*. This opinion is also adopted by Döderlein (*Gloss. Hom.* No. 140), who renders the word "violent," "raging," "impetuous." As this rendering is inconsistent with the application of the epithet to a mast in the *Odys.* xiv. 311, *ἰστὸν ἀμαιμάκετον νηὸς κυανοπράοιο*, Döderlein supposes that the poet was misled by a false analogy, and considered the word as a synonym and derivative of *μακρός*, just as Apollonius Rhodius calls a mast *μέγας* (l. 563) or *περιμήκης* (iv. 1832). It appears to us that the word is derived from *μαιμάσσω*, which is formed from *μαιμάω*, a reduplication of *μάω*, and signifies "to quiver," "move rapidly," "pulsate," &c. We have *μαίμαξ* (*ταραχώδης* Hesych.), and the fifth month in the Athenian calendar, which commenced the winter, was called *μαιμακτηριῶν*, from *Ζεὺς μαμμακτής*, i. e. the disturbed state of the weather. As applied then to the mast of Ulysses *ἀμαιμάκετος* must mean strong, stiff, unyielding, in the midst of the waves. From this sense of immovable, unyielding, comes the meaning "irresistible," "invincible," which is applicable to all the passages in the ancient poets in which this adjective occurs. Thus it is an attribute of the irresistible chimæra (*Hom. Il.* vi. 179, xvi. 329), and of the fire which it breathed (*Hesiod, Theog.* 319), or of fire in general (*Soph. Œd. T.* 171); it is predicated of the deep sea (*πόντος*), which no wind can shake to its

bottom (Pind. *Pyth.* i. 14; cf. the epithet *δυσήνεμος*, Soph. *Antig.* 587, applied to the sand at the bottom of the sea); of the irresistible wrath (*μένος*) of the goddess of destruction (Pind. *Pyth.* iii. 33); of the irresistible collision (*κνηθμός*) of the Symplegades (Pind. *Pyth.* iv. 308); of the invincible trident (*τριόδους*) of Neptune (Pind. *Isthm.* vii. 35); of the Eumenides, as immovable in their purpose or not to be meddled with, according to the two applications of *ἀκίνητος* (Soph. *Æd. Col.* 127, where the Scholiast writes *ἀκαταμαχήτων ἢ ἀπροσπελάστων*). In the general sense of thinking or caring about any thing, *μένω*, *μέλλω*, and the impersonal *μέλει*, may be compared with the Gothic *munan*, German *meinen*, old Nordish *man* (Grimm, i. p. 926). The same idea of thinking about a thing enters into the subjective negation *μή* (above, p. 361). All these words, as we have said more than once, are connected with the root of the first personal pronoun, and a feeling of subjectivity or self lies at the root of them all: compare, for instance, the very similar form *μόν-ος* (above, p. 282). To return to the question before us: the root *θε-* means “to place” (*τί-θη-μι*), *θα-* or *θο-* means “to sit” (*θα-άσσω*, *θῶ-κος*), and *θο-* or *θε-* means “to run” (*θό-ος*, *θέω*), and these are ultimately identical. Modern scholars have not observed this fact, and have therefore got into great difficulties about some words of this class. The word which has caused them most doubt is *θοάζω*. That this word may signify “to move quickly,” whether in a transitive or intransitive sense, appears from the following passages of Euripides: (1) Transitive, *Bacchæ*, 65, *θοάζειν πόνον*; *Iph. Th.* 1142, *θοάζειν πτέρυγας*; *Orest.* 355, *θοάζων σὲ τὸν μέλεον*; *Her. F.* 382, *ἐθόάζον κάθαιμα σῖτα γένυσσι*. (2) Intransitive, *Bacch.* 216, *κλύω—γυναικάς θοάζειν Λιόνυσσον*; *Troad.* 349, 507, *μαινὰς θοάζουσα—θοάζει δεῦρο δρόμῳ*; *Orest.* 1542, *θοάζων αἰθερος ἄνω καπνός*; *Phœniss.* 800, *ἱππείλαισι θοάζεις*. And its connexion with *θοός* is indisputable. At the same time it is equally clear that in Æschylus *Suppl.* 610:

ὕπ ἀρχὰς δ' οὔτινος θοάζων
τὸ μείον κρείσσόνων κρατύνει.
οὔτινος ἄνωθεν ἡμένον σέβει κάτω.

and in Soph. *Æd. Tyr.* 2:

τίνας ποθ' ἔδρας τάσδε μοι θοάζετε—

the meaning of the word is “sit:” and, indeed, Plutarch (*de Audiendis Poetis*, p. 22 E) and the *Etymologicum Magnum* (v. *θῶκος*, p. 460, 10) acknowledge this meaning in Sophocles. But modern scholars, from not perceiving that the same root may convey contrasted ideas, have gone wrong about this word; for while Buttmann, on the one hand (in his *Lexilogus*, ii. p. 105), thinks it necessary to suppose that *θοάζω*,

"to move violently," is derived from *θοός*, and that *θοάζω*, "to sit," comes from *θέω*, *τίθημι*; Hermann, on the contrary (*ad Sophoclis locum*), denies the existence of the latter signification, and twists the two passages of Æschylus and Sophocles to a very forced and unnatural meaning. The gloss in Hesychius shows, not, as Hermann supposes, that he was puzzled by the word, but that it possessed a very extensive range of meanings: *θοάζει· τρέχει, μαίνεται, σκιολῶ, κτείνει* (read *ἐκτείνει*), *σπεύδει, ταράττει, κάθηται, χορεύει, ἀνύει, ἥδεται, τελεῖ, πλάττει, φοβεῖται, πλανᾶται, θεοφορεῖται*. That most of these meanings are directly, or by implication, conveyed by the word *θοάζω*, might easily be shown by a more minute examination of the whole family to which it is related. It is generally agreed that in Æschylus, *Choëph.* 853, and Euripides, *Medea*, 1409, we ought to substitute corresponding forms of *ἐπιθεάζω* for the *ἐπιθοάζουσα* and *ἐπιθοάζω*, which appear in the ordinary editions.

473 The root *θα-*, *θε-* or *θο-*, which we are now discussing, occurs in another, perhaps an older form, as *σα-*, *σε-* or *σο-*. From many indications in the classes of words, into which one or other form of this root enters, it is probable that the syllable was generally closed by a *f*. We are disposed to believe that the ground-meaning of the root is "place" or "make," with which the second meaning, "be placed" or "seated," is intimately connected. The most important word into which the root enters with this meaning is *θεός*, and its oldest form was *σιός*, which was used by the Lacedæmonians to the latest time, and to which *θεός*, as has been already remarked, bears the same relation that *θάλασσα* does to *σάλασσα*, and *θέλω* to *σέλας*. In compounds, the Laconians pronounced it *ιός*. Thus Bacchus was called *εὐίος* for *εὐσιος*, just as they said *ποιῆαι* for *ποιῆσαι*, and *βουῶα* for *βουσῶα* (*Etymol. Magn.* p. 391). It may be interesting to know that there are in the Sanscrit language representatives both of *σιός* and *θεός*. To the latter the common word *dēva* corresponds, to the former *çiva*, the name, indeed, of a particular god in the Hindu mythology, the god of fire (Bohlen, *Das alte Indian*, I. p. 206), but still only a general name for the deity (Bohlen, I. pp. 148, 206), as appears from the neuter noun *çivam*, which means "happiness," "prosperity," the lot of the gods (*Arjuni Reditus*, v. 19). These two words and the Latin *divus*, if, as we have no doubt is the case, they are identical with the Greek *θεός*, *σιός*, would incline us to suppose that the digamma had slipped out in their Greek synonyms. In attempts to represent directly in Greek characters the Sanscrit and Persian names for the Divinity, this digamma sound is represented by the *v*, or a lengthening of the root-syllable. Thus Hesychius: *Δεύας· τοὺς ἀνά-*

κους θεούς. Μάγοι (where Reland proposes to read ἄνακας, scil. τους Διосκούρους); and Athenæus, i. p. 27 D: ὅτι παρ' Ἰνδοῖς τιμᾶται δαίμων, ὃς φησι Χάρης ὁ Μυτιληναῖος, ὃς καλεῖται Σοροάδειος· ἐξημενύεται δὲ Ἑλλάδι φωνῇ οἰνοποιός, where he is evidently alluding to *Sûryadêva*, "the sun-god," who was, as we have elsewhere shown, the same as the god of wine. The Indians had, properly speaking, no wine-god (Schlegel's *Indische Bibliothek*, i. p. 250). If we may be allowed to hazard such a conjecture, the epithets in Æschylus, *Persæ*, 86, Σύριον ἄρμα διώκων, and in the oracle quoted by Herodotus, vii. 140, Συρηγενὲς ἄρμα διώκων, where Xerxes, or the Persian war-god, is spoken of, refer to the sacred chariot (τὸ ἄρμα τὸ ἐρόν, Herod. vii. 55), which always attended the Persian armies on their march, and which, though called the chariot of Jove by Herodotus (vii. 40), may have been identical with the chariot of the sun, Ἥλιου ἄρμα λευκόν, which Xenophon represents as following it (*Cyrop.* viii. 3, § 11); for it was drawn by *white* horses, which were consecrated to the sun (Herod. i. 189, vii. 113), and a remarkably beautiful horse, sacred to that god, was led behind it (Q. Curtius, iii. 3, § 13). The decision of Darius's claim to the throne by his horse's neighing at sun-rise (Herod. iii. 84) seems to have reference to the same symbolical connexion of the horse with the sun*. The epithet *συρηγενὲς* appears to be quite equivalent to the Sanscrit *sûrya-ja* or "sun-born." It is likely that the Greeks would have heard of the Persian name for this chariot, and that this name would be explicable from the Sanscrit is consistent with all that we know of the old language of the Persians. If this interpretation is not correct, we shall find it difficult to explain why the Syrian chariot should be so specially mentioned in connexion with the army of Xerxes. Still less shall we be able to explain the distich, quoted from a Spanish MS. by Blomfield on the passage of the *Persæ*, in which it is assigned to an Indian:

"Ἴνδος ὅδ' ἀνὴρ Τροίῃ Σύριον ἄρμα διώκων
Πουλυδάμας κείμας νεκρὸς ἐπὶ πατρίδι.

The substitution of the ethnical adjective Σύριος, which the Greeks so well understood, for a foreign term which conveyed no significance to them, is quite in accordance with a tendency which has often been observed. Nothing in fact is more common than this transmutation†,

* See a paper on this subject which we have contributed to the *Journal of the Royal Asiatic Society*, Vol. xvi. Part i. pp. 1—7.

† "The desire of converting a strange into a familiar sound is a frequent cause of corruption in all languages. Changes of this sort are usually made without any reference to the meaning of the word. Thus the French *rondeau* became *round* *O*, and *bourdon* became *burden* (of a

as when the Westphalian peasant, who was sent to the chemist's shop for *unguentum Napolitanum*, asked for *angewandten Napoleons*, or to take a similar illustration, when we find the poisonous *hyoscyamus* or "hog-bean" metamorphosed through *he'ben* (see the commentators on Shakspeare, *Hamlet*, Act i. Sc. 5, where we should read "with juice of cursed he'ben in a vial"), into "hen-bane." The supposition that the root we are discussing was θεF- is farther confirmed by the future θεύσομαι=θεFσομαι from θέω=θέFω, by the forms θαFάσσω (for in words of this kind we may presume that there was once a digamma), θαβακόν (=θαFακόν), which Gregor. Corinth. (p. 354) quotes as the Doric form of θακόν, σέ-β-ω=σέFω=σένω=σείω=σαι-νω, σοῦμαι=σόFομαι (which occurs in Apollonius Rhodius), σοβεῖν=σοFεῖν, and Ζεύς=δγεFς. Heronotus tells us (II. 52) that the dame θεός was Pelasgian, and was derived from τί-θη-μι: ἔθνον δὲ πάντα πρότερον οἱ Πελασγοὶ θεοῖσι ἐπενχόμενοι, ὥς ἐγὼ ἐν Δωδώνῃ οἶδα ἀκούσας, ἐπωνυμίην δὲ οὐδ' οὔνομα ἐποιεῦντο οὐδενὶ αὐτῶν· οὐ γὰρ ἀκηκόεσάν κω. θεοὺς δὲ προσωνόμασάν σφεας ἀπὸ τοιούτου, ὅτι κόσμῳ θέντες τὰ πάντα πρήγματα καὶ πάσας νομὰς εἶχον. Plato derives the word from θέειν, from the apparent motion of the heavenly bodies which were the objects of worship in an elementary religion (*Cratylus*, p. 397 c, d). The *Etymologicum Magnum* (p. 445, 42) gives both etymologies. Clemens of Alexandria (*Strom.* I. *ad fin.*), like Herodotus, derives θεός παρὰ τὴν θέειν καὶ τάξειν καὶ τὴν διακόσμησιν, and Eustathius too says (*ad Iliad.* p. 1148) that θεός is ὁ πάντα τιθεὶς καὶ ποιῶν. We agree with this etymology, as well from its obviousness, as because the analogy between Κάδμος, who was the god of the Pelasgians of Bœotia, and was identical with Κάδμιλος, one of the Cabiri (Müller's *Orchomenos*, p. 216), and κέκασμαι, κέκαδμαι, κέκαδον, κεκάδηκα, καθαρός, κόσμος, &c. (above, § 267), would at once lead us to it. It is not impossible that the same root may lurk in the hitherto unexplained word *Gott*, "God." There is good reason to believe that the etymology which would connect *Gott*, "God," and *gut*, "good," is erroneous (see *Blackwood*, Feb. 1840, p. 205): and we think that while the latter is related to the root γαθ- or γηθ- of ἄ-γαθός, &c., the former contains the element καθ- of καλός, so that the compound καλοκάγαθός actually unites the substantive *God* with the adjective *good*. If this is the case, θεός and "God" mean "the creator;" in immediate connexion with which we have

song); so *bumble bee* became *humble bee*, *kink-cough* became *chin-cough*, and *gorst-berries*, *gooseberries*. The *craig* (i. e. throat) *end* of a neck of mutton became the *scrag end*; and *lustring*, a shining silk, so called from its lustre, was commonly called *lutestring*. *Livorno* was changed into *Leghorn*, *Coruña* into the *Groin*, and a *Prussian fir* into a *spruce fir*." Sir G. C. Lewis, *Gloss. of Prov. Words in Herefordshire*, p. 89.

τίθημι, to "make" or "place," *κάζω*, "to arrange," together with *θύω*, "sacrifice," and *σέβω*, "worship." The last word but one often expresses violent motion, but we do not think, with Passow, that this meaning is due to the notion of flaming, blazing, &c., derived from a sacrifice of burnt-offerings. The meaning of motion became attached to words from this root according to the principle of suggestion from contrast, and there is no class of words in which the meanings are more mixed up together than in this. With regard to the form, *θύω* bears the same relation to *θέω*, *σέβω*, &c., that *βρῶν* and *ἐμβρυνον* do to *βρέφος*, *ξύω* to *ξύφος*, &c. In the words *θέω* and *θοός*, the most prominent meaning is that of motion. The latter is used in the sense of "terrible," "dreadful," when applied as an epithet to *νύξ*; but the idea of swiftness seems to be included in the word even in this application of it, for most persons, whose reason has not the full command over their other faculties, are accustomed to look upon that which is sudden and startling as also alarming and terrible. Compare the use of *κατασπέρχω* (Thucyd. iv. 126), &c. Buttmann has clearly shown (*Lexilogus*, II. p. 60) that *θοός* has also the meaning "sharp," "pointed," as a synonym for *ὀξύς*: he appears, however, to be wrong in supposing that this was the primary signification, and that *θήγειν*, *θαῖσσον*, *ταχύς*, contain older forms and meanings of the word than *θέω*: a comparison of the terms "sharp" and "quick" in English, the use of the word "set," as applied to sharpening a knife, the resemblance of *ὠκύς* and *ὀξύς*, and the English word "fast," which means both "fixed" and "rapid," will show us that the ideas of fixedness, rapidity, and sharpness, are frequently interchanged (see also above, § 218). There can be little doubt that, as Buttmann supposes, the *θηῖτες* or lowest division of the subjects of Athens were so called from their being the oldest inhabitants, the *Sassen* or *Insassen* (inhabitants), and similarly we may recognise the root *κε-* (*κεῖμαι*, &c.) in *ci-vis*, Osc. *keus*. The word *θυμός* conveys the idea of an eager motion towards any thing, an impulse; and in this sense it agrees pretty well with the second meaning of *θύω*, from which also the idea of anger may easily be derived: the idea of "motion towards" is implied in anger as well as in desire, and hence we have such phrases as *θυμοῦσθαι εἰς τι*, "to be angry with a thing," as in Herod. iii. 52: *ἐς τοὺς τοκέας καὶ ἐς τοὺς κρέσσονας τεθυμῶσθαι*. The phrase *ἐς κέρας θυμοῦσθαι* is of a different origin (above, p. 318).

474 It has been mentioned above, that the initial syllable of a number of words, such as *θέξ-φατος*, *θέξ-κελος*, *θέξ-πις*, &c., is merely a mutilation of *θεοῖς* (§ 310). This explanation is not applicable to *θεσ-μός*, which is a simple derivative from the root *θε-* now under

discussion, the σ - being an euphonical insertion, as in $\delta\epsilon\sigma\text{-}\mu\acute{o}\varsigma$ from $\delta\acute{\epsilon}\omega$ (above, § 253). For $\theta\epsilon\sigma\mu\acute{o}\varsigma$ we have the by-form $\tau\epsilon\theta\text{-}\mu\acute{o}\varsigma$; θ very often appears instead of σ before the termination $\text{-}\mu\acute{o}\varsigma$, and *vice versâ*;—thus we have not only $\rho\upsilon\theta\text{-}\mu\acute{o}\varsigma$, $\rho\upsilon\text{-}\mu\acute{o}\varsigma$, but $\rho\upsilon\text{-}\sigma\text{-}\mu\acute{o}\varsigma$ was also used in the sense of $\sigma\chi\eta\mu\alpha$ by Democritus (Aristot. *Metaphys.* p. 1042 Bekker);—and $\tau\epsilon\theta\text{-}\mu\acute{o}\varsigma$ is written for $\theta\epsilon\theta\text{-}\mu\acute{o}\varsigma$, just as we have $\acute{\epsilon}\tau\acute{\epsilon}\theta\eta\nu$ for $\acute{\epsilon}\theta\acute{\epsilon}\theta\eta\nu$. A question may be raised, whether we should connect $\delta\epsilon\sigma\text{-}\pi\acute{o}\tau\eta\varsigma$ with $\delta\acute{\epsilon}\omega$, like $\delta\acute{\epsilon}\sigma\text{-}\mu\acute{o}\varsigma$, or with $\tau\acute{\iota}\theta\eta\mu\iota$. That the latter part of the word is connected with the Sanscrit *pati*, “a lord” or “husband,” Latin *pot-ens*, *pot-ior*, &c., is sufficiently obvious. For the feminine we have not only $\delta\acute{\epsilon}\sigma\text{-}\pi\omicron\iota\nu\alpha$, but also $\pi\acute{o}\tau\nu\iota\alpha$, corresponding to the Sanscrit *patnî*, and $\pi\acute{o}\tau\nu\alpha$. We have $\pi\acute{o}\tau\nu\iota\alpha$ with a genitive case, as an epithet, like the *Diva potens Cypri* of Horace; thus Homer, *Il.* xxi. 470: $\pi\acute{o}\tau\nu\iota\alpha \theta\eta\rho\omega\tilde{\nu}$. Pind. *Pyth.* iv. 213=380: $\pi\acute{o}\tau\nu\iota\alpha \acute{\omicron}\xi\nu\acute{\alpha}\tau\omega\nu \beta\epsilon\lambda\omega\tilde{\nu}$. Now the name for a master of a house in Latin is *hos-pes* (*hos-pit-s*), and it appears from a comparison of the Latin *hos-tis*, *hostia*, Gothic *Gasts*, Slavonian *Gos-podar* or *Hos-podar*, new High German *ge-gessen*, and the Sanscrit root *ghas*, “to eat,” that *hos-pit-s* means “the master of the feast.” If, then, we remember how often $\tau\acute{\iota}\theta\eta\mu\iota$ is used in speaking of a meal (comp. $\pi\alpha\rho\acute{\epsilon}\theta\eta\kappa\epsilon \tau\rho\acute{\alpha}\pi\epsilon\zeta\alpha\nu$, &c.), and that the word $\theta\omicron\iota\text{-}\nu\eta$, together with $\theta\omega\sigma\theta\alpha\iota$ and $\theta\omega\sigma\alpha\sigma\theta\alpha\iota$, which are quoted from Æschylus as synonyms for $\acute{\epsilon}\nu\omega\chi\epsilon\acute{\iota}\sigma\theta\alpha\iota$, are manifestly connected with the root $\theta\epsilon\text{-}$ (comp. $\theta\acute{\omega}\kappa\omicron\varsigma$, &c.), we must conclude that $\delta\epsilon\sigma\pi\acute{o}\tau\eta\varsigma$ is a synonym of the Latin *hos-pit-s*, and that the first syllable contains the root $\theta\epsilon\text{-}$ by a change from θ to δ , like that which we have pointed out in the inflexions (§ 249) and terminations (§ 262) of the noun. Whether $\delta\omicron\tilde{\upsilon}\text{-}\lambda\omicron\varsigma$ is connected with $\delta\acute{\epsilon}\omega$, or bears the same relation to the Sanscrit *dâsa*, “a slave” (from the root *dâs*, “to give”), that $\delta\alpha\nu\lambda\acute{o}\varsigma$ does to $\delta\alpha\sigma\acute{\upsilon}\varsigma$ (Pott, *Etymol. Forsch.* i. p. 190), we do not venture to decide.

475 The common adjective from $\delta\epsilon\sigma\pi\acute{o}\tau\eta\varsigma$ is $\delta\epsilon\sigma\pi\acute{o}\sigma\upsilon\nu\omicron\varsigma$. We have, however, another form $\delta\epsilon\sigma\pi\acute{o}\sigma\iota\omicron\varsigma$, in Æschylus, *Supplices*, 848: $\delta\epsilon\sigma\text{-}\pi\omicron\sigma\acute{\iota}\omega \xi\acute{\iota}\nu \tilde{\upsilon}\beta\rho\epsilon\iota$, where Turnebus reads $\theta\epsilon\sigma\pi\epsilon\sigma\acute{\iota}\omega$, and Stephens $\delta\epsilon\sigma\text{-}\pi\omicron\sigma\acute{\upsilon}\nu\omega$. We think the word is genuine, and that it is confirmed by the name $\delta\epsilon\sigma\pi\omicron\sigma\iota\omicron\nu\alpha\tilde{\upsilon}\tau\eta\varsigma$, given by the Lacedæmonians to the helots who were emancipated and sent on ship-board. Myron (*apud Athenæum*, p. 271 F) says: $\pi\omicron\lambda\lambda\acute{\alpha}\kappa\iota\varsigma \acute{\eta}\lambda\epsilon\nu\theta\acute{\epsilon}\rho\omega\sigma\alpha\nu \Lambda\alpha\kappa\epsilon\delta\alpha\iota\mu\acute{o}\nu\iota\omicron\iota \delta\omicron\upsilon\lambda\omicron\upsilon\varsigma$, $\kappa\alpha\acute{\iota} \omicron\upsilon\varsigma \mu\acute{\epsilon}\nu \acute{\alpha}\phi\acute{\epsilon}\tau\alpha\varsigma \acute{\epsilon}\kappa\acute{\alpha}\lambda\epsilon\sigma\alpha\nu$, $\omicron\upsilon\varsigma \delta\acute{\epsilon} \acute{\alpha}\delta\epsilon\sigma\pi\acute{o}\tau\omicron\upsilon\varsigma$, $\omicron\upsilon\varsigma \delta\acute{\epsilon} \acute{\epsilon}\rho\nu\kappa\acute{\iota}\tau\eta\rho\alpha\varsigma$, $\delta\epsilon\sigma\pi\omicron\sigma\iota\omicron\nu\alpha\tilde{\upsilon}\tau\alpha\varsigma \delta\acute{\epsilon} \acute{\alpha}\lambda\lambda\omicron\upsilon\varsigma$, $\omicron\upsilon\varsigma \acute{\epsilon}\iota\varsigma \tau\omicron\upsilon\varsigma \sigma\acute{\tau}\acute{o}\lambda\omicron\upsilon\varsigma \kappa\alpha\tau\acute{\epsilon}\tau\alpha\sigma\sigma\omicron\nu$. It will be recollected, that in the passage under consideration, a herald is endeavouring to force the Danaïdes and their father to go on board a ship; and Æschylus, who had often served in the same fleet with the

Lacedæmonians, might very well have understood that sense of *δεσπόσιος* with which it was applied to the "slave-sailors." We conceive that the *δεσποσιοναῦται* were so called, not because they were *herilium navium magistri*, as Casaubon renders the compound, but because they were still liable to the *δεσπύσννοι ἄναγκαι* (*Pers.* 479) on board ship, though free from the other liabilities of helotism—in fact they were on the same footing as the "pressed bakers," who are described by Thucydides (vi. 22) as *σιτοποιοὺς ἐκ τῶν μυλῶνων πρὸς μέρος ἡναγκασμένους ἐμμίσθους*, i. e. "hired bakers procured from the mills by a compulsory levy" (Böckh, *Staatshaush.* Bk. ii. c. xxii. p. 286 Eng. Tr.). In accordance with this technical expression, Æschylus makes the Danaïdes describe the insolence of the herald as similar to that to which the pressed or helot-sailors were exposed. As the whole passage has hitherto defied the efforts of criticism, we shall make no apology for attempting to correct and explain it in a work which professes to contribute to the more accurate knowledge of the Greek language. We think that the antistrophic portion does not begin until v. 843 ed. Dindorf. The preceding line should be read, with Dobree, *σοῦσθε, σοῦσθ' ὀλόμεναι ὀλόμεν' ἔφ' ἁλίαδα*, and then the strophes will proceed as follows:

Χορός.	1 *εἴθ' ἀνὰ πολύρyton	στρ. α'.
	2 ἀλμύεντα πόρον	
	3 δεσποσίῳ ξὺν ὕβρει,	
	4 γομφοδέτῳ δὲ δόρει †διώλου.	
Κῆρυξ.	5 αἶμον' *ἔσω σ' ἐπὶ *βᾶριν.	
	6 *ἦ σὺν *δουπεῖς *ἄπνυτα;	
	7 κελεύω βίᾳ μεθέσθαι.	
Χορός.	8 *ἵκταρ *φρενὸς *ἄτα,	
	9 ἰὼ ἰοῦ.	
Κῆρυξ.	10 λεῖφ' ἔδρανα, κί' ἐς δόρου	
	11 ἀτίετ' *ἄμπαλιν εὐσεβῶν.	
Δάναος.	1 μήποτε πάλιν †ἵδοιμ'	ἀντιστρ. α'.
	2 ἀλφεσίβοιον ὕδωρ,	
	3 ἐνθεν ἀεξόμενον	
	4 ζώφyton αἶμα βροτοῖσι θάλλει.	
	5 *ἄγνὸς ἐγὼ βαθυχαῖος,	
	6 *γέρον, †ἀνάξιος *βίας.	
Κῆρυξ.	7 σὺν δὴ ναῖ ναῖ βάσει	
	8 τάχα θέλεος ἀθέλεος,	
	9 βίᾳ βίᾳ.	
	10 βᾶθι πρόκακα †[πρὶν] παθεῖν	
	11 †ὀλομένα παλάμαις *[εἰμαῖς].	

Χορός. 1 αἰαῖ, αἰαῖ, στρ. β'.
 2 καὶ γὰρ δυσπαλάμῳς ὅλοιο
 3 δι' ἀλλήροντον ἄλσος
 4 κατὰ Σαρπηδόνιον
 5 χῶμα †πολύψαμμον ἀλαθεῖς
 6 †ἐνρεΐαισιν αὔραις.
 * * * *

Χορός α'. 1 οἶ οἶ οἶ οἶ ἀντιστρ. β'.
 2 *λύμας· †ἄργια *γὰρ *σὺν λάσκεις.
 β'. 3 περιχομπτα βρονάξεις.
 γ'. 4 ὁ *σαρῶν γὰν, ὁ μέγας
 5 Νεῖλος, ὑβρίζοντά σ' ἀποτρέ-
 6 ψειεν αἵστον ὕβριν.
 * * * *

Χορός. 1 οἶ οἶ πάτερ †βροτέων πρὸς ἅ- στρ. γ'.
 2 ταν ἀλκά μ' ἄγει,
 3 ἄραχνος ὥς βάδην
 4 ὄναρ ὄναρ *μ' ἐλών.
 * * * *

1 μαιμῶ πέλας δίπους ὄφις ἀντιστρ. γ'.
 2 *[θεῶν οὐ φροντίδας],
 3 ἔχιδνα δ' ὥς μέ τις
 4 *πόδα δακοῦσ' ἄγει.

The following is a literal translation. *Chorus*. "Would you had perished outright on the rolling briny main, with your domineering insolence and your nail-fastened ship." *Herald*. "I will set you bleeding on board my bark. What! are you beating your breast, bawler? I bid you desist." *Chorus*. "Mischief is near my heart, alas! alas!" *Herald* (to Danaus). "Leave these seats; go to the ship, revering once more what you have dishonoured." *Danaus*. "Never again may I see the enriching stream, whence the life-giving blood finds its growth and vigour for mortals. I am pure, and of ancient descent, undeserving of violence, old man!" *Herald* (to Danaus). "You shall soon go to the ship, to the ship, whether you will or no, by force, by force!" (to the Chorus). "Go before you suffer the preludes of woes, being struck to death by my hands." *Chorus*. "Woe, woe! for may you perish helplessly out on the salt-flowing plain, driven to and fro in the wide breezes off the sandy promontory of Sarpedon."...*Chorus* a. "Ah! what an outrage: for you utter savage words." *Chorus* b. "Proudly you stalk nearer and nearer!" *Chorus* c. "May the mighty Nile, that sweeps o'er the land, turn you back in perpetrat-

ing this unheard-of insolence!"... "Oh! my father, the supposed security of the altar is leading me to mischief, like a spider having taken me, step by step, a dream, a dream!"... "The two-footed serpent is raging near me, with no thought for the gods; and some viper, as it were, having bitten my foot, is leading me away."

Although the corrections, which we have introduced on our own conjectures or borrowed from other scholars*, are very considerable, we believe that they are all in accordance with the soundest rules of criticism, and they are confirmed by their results—the restoration of the antistrophic metres and of a simple meaning to the most confused passage in the whole range of Greek poetry. With regard to the phraseology the following remarks will suffice. The peculiar applicability of the epithet *γομφόδετος* to an Egyptian *βᾶρις* is proved by Herodotus, II. 96, and for the wish of the Danaïdes, we have only to look back to vv. 33—36. The future *ἔσω* does not occur, but we find the aorist *εἶσα* in the same sense as here in Hom. *Il.* ix. 200: *εἶσεν δ' ἐν κλισμοῖσι*. XIII. 657: *ἐς δίφρον ἀνέσαντες*. *Od.* i. 361: *ἐς Ἀσάμυνθον ἔσασα*. For the emphatic question *ἦ σὺ* we may compare *Agam.* 1523: *ἦ σὺ τόδ' ἔρξαι πλήσῃ*; κ.τ.λ. cf. *Prom.* 745: *σὺ δ' αὖ κέκραγας*. The verb *δουπεῖν* is particularly applied to express the *planctus*, which was a necessary part of female lamentation. Thus we have in Eurip. *Alcest.* 103: *οὐδὲ νολαία δουπεῖ χεῖρ γυναικῶν*: in Soph. *Aj.* 633: *χερόπληκτοι δ' ἐν στέρνοισι πεσοῦνται δοῦποι, καὶ πολίᾳς ἄμυνμα χαίτας*: and in Æsch. *Pers.* 120, we have: *καὶ τὸ Κίσθινον πόλισμ' ἀντίδουπον ἔσσεται, ὁά, τοῦτ' ἔπος γυναικοπληθῆς ὁμιλος ἀπῶν*, where the ideas of "beating" and "crying" are placed together, as in the passage before us, if we have rightly introduced *ἄπυτα*. With regard to this latter word, which is an Homeric epithet for a herald, there does not appear to be any reason why it should not be a general term for loud and clamorous speaking, and Quintus Smyrnaeus uses it as an epithet for the feminine noun *σῶριγξ*, just as we have *ἡχέτα τέττιξ* in Hesiod. The phrase *βία* or *βίης μεθέσθαι* is Homeric; thus, *τρίς δὲ μεθήκε βίῃ* (*Il.* xxi. 177; *Od.* xxi. 126); and the quasi-preposition *ἵκταρ* occurs with the genitive case

* We are acquainted with those conjectures only which are recorded in the editions of Butler (*Cantabr.* 1809), Wellauer (*Lips.* 1823), Dindorf (*Oxon.* 1841), and Paley (*Cantabr.* 1851). The last of these has introduced many of our emendations, and we have accepted some of his suggestions in return. To save the necessity of repeated reference we have designated all the emendations which we have introduced for the first time by an asterisk (*), and have placed an obelus (†) before those which had been suggested previously. With regard to the emendations of Bothe and Burges, we subscribe to Wellauer's remark: *sed hæc risui sunt cuivis sano*.

in Æschyl. *Ag.* 114; *Eumenid.* 1000; and as an adverb in Plato, *Resp.* ix. p. 575 c. The last two lines of the strophe are addressed to Danaus, to whom we also assign the first six lines of the antistrophe. We conceive that ἄμπαλιν is justified by the μήποτε πάλιν which follows, just as παλάμαις (ἀντ. α'. 11) suggests the following δυσπαλάμως. The epithet ἀλφεσίβοιος seems to bear a general sense in the present passage, without any immediate reference to the production of oxen. In Homer ἀλφεσίβοιαι παρθέναι (*Il.* xviii. 593; *Hymn. in Vener.* 110) are damsels who procure for their fathers large gifts of cattle from their bridegrooms (Döderlein, *Gloss. Hom.* No. 2268); and the epithet is therefore synonymous with the female names, Ἡερύβοια, Περίβοια, Εὐβοια, Πολύβοια, &c. The proposal to derive ἀλφειν, like ἄλφα (*Plut. Sympos. Qu.* ix. 3, p. 1047 Wyttenb.), from the Semitic word for "an ox," and the inference that ἄνδρες ἀλφησταί are "traders in cattle," and ἄλφιτον "the food of cattle" (Paley, *on Propert.* iv. 17, 19), is not likely to be generally accepted. It seems clear, on the contrary, that Pott (*Etym. Forsch.* i. p. 359) and Döderlein (*u. s.*) have arrived by different routes at the same true result when the former compares ἀλφαίνω with the Sanscrit *á-labh*, "to obtain," and when they both recognise in it the stem of λάπ-τειν, λαβ-εῖν, &c.; cf. ἀ-λάβαστρος. Benfey (*Wurzellex.* i. p. 75) compares ὄλβ-ος, which belongs to a different root (above, § 116). We have extracted the new reading of ἀντιστρ. α'. 5, 6, from the corrupt words of the Scholiast: ἐγὼ ἢ[ό?] βαθυχαῖος ἀναξία [ἀνάξιος?] ταύτης τῆς β[ατρει]ίας, γέρον. According to our view, Danaus signifies to the herald that he is ἄγνός, i. e. religiously pure in his worship of the foreign gods, (so he is called ἄνῃρ ἄγνός, in v. 358), for that he is an old noble in Argos, and therefore undeserving of violence on the part of an Egyptian. Or the epithet may refer to his being on sacred ground, as in v. 223: ἐν ἄγνῳ δ' ἔσμὸς ὡς πελειάδων ἵζεσθε. The herald then turns to the Danaïdes, as appears from the change of gender in ὀλομένα. Here we have omitted the superfluous words, under the guidance of the metre. It seems to us that βία πολλῶν was a marginal gloss on βία βία, and φροῦδα, which is not found elsewhere in Æschylus, is an explanation of βᾶδι. The necessary particle πρὶν might easily slip out in a sentence which contained προ-, but μή, which is found in the Medicean MS., might take its place with an allowable construction. We have added ἐμαῖς in l. 11; it is merely a repetition of the end of παλάμαις, by which it was probably absorbed. With one slight alteration στρ. β'. seems to be correct, and guides us through the otherwise inextricable difficulties of the ἀντιστροφῇ. We consider λύμας a genitive dependent on the interjection, according to the well-known construction. We are willing

to believe that *περίχοιμπα βρονάξεις*, though not very easy, is justified by *περίπεμπα θυοσκεῖς* (*Ag.* 87); compare also *Soph. Œd. T.* 192: *φλέγει με περιβόητος ἀντιάζων*. It must refer to the insolent and boisterous manner in which the herald stalked round the group of suppliants, continually drawing nearer to them: the same is obviously implied in the *ἄραχνος ὥς βάδην* (*στρ. γ'. 3*), and *μαιμᾶ πέλας* (*ἀντ. γ'. 1*), which follow. In line 4 of the antistrophe it is manifest that *ὄσ' ἔρωτᾶς* must be corrupt. It seems also clear to us that these words refer in some way to the river Nile; and keeping close to the last traces in the books, we read *ὁ σαρώων γᾶν*, i. e. "he who inundates the land." The word *σαρώω* in this sense has no better authority than Lycophron, who writes (389):

τὸν δ' οἷα δύπτην κηρύλον, διὰ στενοῦ
αὐλῶνος οἷσει κῦμα γυννίτην φάγγρον
διπλῶν μεταξὺ χοιράδων σαρούμενον.

But that there must have been a very old use of the verb *σαρώω* or *σάρω* in this sense, is at least clear from the name of the *Σαρωνικός κόλπος*, the *Σαρωνίδες πέτραι*, and the *Σαρωνία Ἀρτεμις*. In the two remaining strophes we have been guided chiefly by the requirements of the metre. The Scholiast says of the former: *ἡ τῶν βρετῶν ἐπικουρία βλάπτει με*; the old editions have *μέλαν* in v. 4; and the Scholiast renders *ὄναρ* by *μηδὲν οὔσαν*; it is clear therefore that the true reading is that given above. In the antistrophe the supplement *θεῶν οὐ φροντίδας* is suggested by the words of the herald: *οὔτοι φοβοῦμαι δαίμονας τοὺς ἐνθάδε*. The phrase *πόδα δικοῦσα*, for which Paley reads *πόδ' ἐνδακοῦσα*, contrary to the metre, is explained by the fragments which he cites, 231: *φαρέδαιναν ἢ σάρκας ἐσθίει ποδός*. 234: *δεινὴν στοματὸν ἔκφυσιν ποδὸς λαβών*. As to the extraordinary scholium on v. 875: *εἰς ὑπὲρ τῶν Αἰγυπτίων πρεσβέυοι*, we can only suppose that, unless it belongs to something suggested by v. 905: *πολλοὺς ἀνακτας παῖδας Αἰγύπτου τάχα ὄψεσθε*, it must have arisen from the corruption *εἰς πρὸ γᾶς ὑλάσχοι*, suggested by *λυμασ[ις η προγασυλασκει]*. In v. 950, we ought to read: *ἔσται τὰδ' ἤδη πόλεμον αἰρεσθαι νέον*. cf. 335: *βαρέα σύ γ' εἶπας, πόλεμον αἰρεσθαι νέον*. With regard to the whole passage, it may truly be said that any thing is better than the present state of the text; and the old physicians' maxim—*flat periculum in corpore vili*—may be applied here without the slightest risk of injury to the patient.

476 With regard to *θύμος* and *θυμέλη*, the quantity of the first syllable is no reason against concluding that they are connected with *θύω*, as the similarity of meaning, especially of the latter word, would

induce us to suppose. The quantity of the *υ* in words from this root is continually varying, why we know not, any more than we can explain why we should have both *λίπαρης* and *λίπαρός*. Why, for instance, should we have *θύω*, *θύμα*, *θύλακος*, and *θοῦρος*, but *θύάω*, *θύσία*, *θύσανος*, and *θύήλη*? The word *θύμος* seems to have derived its meaning from the use of thyme in fumigations, or because the brushwood of the tree was employed for fuel in sacrifices: its resemblance to the Sanscrit *dhūma*, Latin *fumus*, is obvious, in spite of the difference of quantity; the word *thymus* was, of course, borrowed from the Greek. We do not find any reference to *θύμος* in the article of Hesychius on *θυμός*, which gives the following meanings: *ψυχῇ ἢ προαίρεσιν. ὀξύτης. πνεῦμα. ἐπιθυμία. ὀργή. λογισμός*. Most of these we have already considered: that *θυμός* might signify *πνεῦμα* in its physical sense, a comparison of *θύελλα* forbids us to doubt; but of course the lexicographer refers to the moral or mental application. It is curious that Hesychius includes among the meanings of *θυμός* the very two words which Plato opposes to it, *ἐπιθυμία* and *λογισμός*. The sense of anger is implied in *ὀξύτης*, not in *ὀργή*. The word *προαίρεσις*, meaning a deliberate choice, is well known to the readers of Aristotle's *Ethics*.

477 That *ὀ-οργή* is immediately connected with *ὀ-ορέγω* appears from a comparison of *ὀρόρνια* (Pindar, *Pyth.* iv. 406) with *ὄρνια*, of *ἀλέγω* with *ἄλλος*, &c. The mental or moral meaning of *ὀοργή* is clearly seen in the common use of *ὀ-ορέγομαι*, "I reach out my hands eagerly to take;" so that we have here again a reference to two of the meanings of *λάω*. How intimately these ideas are connected may be seen even in the later writers, who revert to the old usages of language, without any feeling for the etymology. Thus Juvenal says (x. 139): *ad hæc se endoperator erexit*, where we have the sense of *ὀρέγεσθαι* *τινος*. The words *ὀ-οργή*, *ὀ-ορέγω* are made up of the elements *ra*+*Fa* with the vowel prefix *o*; compare *rego*, &c. (above, p. 395). The same compound root appears in *ῥέF-ω* (fut. *ῥεύ-σω*), *ῥεῦ-μα*, *ῥέπ-ω*, *ῥέ-μ-β-ω*, *ῥίπ-τω*, *ῥί-μ-φα*, &c.; in all of which the idea of accelerated velocity is conveyed, as also in the cognate Latin words *rap-io*, *rap-idus*, &c. We have it also with a dental prefix (p. 396) in the secondary formation *δρακ-*, "I take" (cf. *δράσσω*, *δραχμή*, &c.; above, p. 328), in *δέ-ρα*, "I see," and in the Sanscrit termination *dr̥iṣa*, Greek *-λι-κος*, which imply the sense of seeing. That this is only a secondary meaning is clear, the primary one being that of motion just mentioned.

478 That this idea of motion, the common meaning of *ῥέω*, is implied in the Greek notions of seeing, light, &c., appears from such

phrases as ἔστι χροά ἀπορροή σχημάτων (Plato, *Men.* p. 76 D), and from the Greek conception of love as a kind of ophthalmia, caught by an efflux or emanation of particles from the eyes: thus Æschylus says, *Agamemnon*, 414:

πόθῳ δ' ὑπερποντίας
φάσμα δόξει δόμων ἀνάσσειν.
εὐμόρφων δὲ κολοσσῶν
ἔχθεται χάρις ἀνδρί,
ὀμμάτων δ' ἐν ἀχηνίαις
ἔρρει πᾶς Ἀφροδίτη.

i. e. after the abduction of Helen, her image would seem to be mistress of the house; but Menelaus would take no pleasure in statues, however beautiful, and in the want of eyes (for the Greek statues had none, or rather they were cold and inefficacious) all love would vanish (see the imitation in Euripides, *Alcestis*, 348 foll.). And with a corresponding sentiment, the same Helen is said (*Agam.* 719) to have come to Troy as μαλθακὸν ὀμμάτων βέλος, δηξίθυμον ἔρωτος ἄνθος, “a tender dart from the eyes, a soul-consuming flower of love.” That ὀμμάτων refers to the eyes of Helen, and not, as some of the commentators suppose (on the strength of the phrase in Herod. v. 18, quoted below), to the eyes of those who gazed on her beauty, is clear from v. 229: ἔβαλλ' ἕκαστον θυτήρων ἀπ' ὀμματος βέλει φιλοίκτηρ. Similarly, Sophocl. *Antig.* 795:

νικᾷ δ' ἐναργὲς βλεφάρων ἥμερος εὐλέκτρον
νύμφας,

where the two genitives would be very awkward, unless βλεφάρων ἥμερος are to be taken together in close connexion (see Julius Pollux, II. § 63: λέγοντο δ' ἂν ὀφθαλμοὶ λάμποντες, κ. τ. λ., καὶ τὸ ἀπ' αὐτῶν ἀπορροέον ἥμερος). Euripides, *Hippolytus*, 525:

ἔρως, ἔρως, ὃς κατ' ὀμμάτων
στάξεις πόθον, εἰσάγων γλυκεῖαν
ψυχὴν χάριν.

Iph. Aul. 584:

ὃς τὰς Ἑλένας ἐν ἀντώποισι βλεφάροις
ἔρωτας ἔδωκας.

Plato, *Phædrus*, p. 251 B: δεξάμενος τοῦ κάλλους τὴν ἀπορροήν δια τῶν ὀμμάτων. Aristot. *Eth. N.* IX. 12: τοῖς ἐρώσι τὸ ὄραν ἀγαπητότατόν ἐστι. Herod. v. 18: ἀντίως ἵζεσθαι γυναικας, ἀλγρηδόνας σφι ὀφθαλμῶν. Wesseling ad l.: “Isæi Rhetoris—qui rogitantī Ardui, εἰ ἡ δεῖνα αὐτῷ καλῇ φαίνοιτο, modestissimi (μᾶλα σοφρόνως) respondit

πέπνυμαι ὀφθαλμῶν." Plut. *Alex.* 21: Longin. iv. 12; Ovid, *Heroid.* xii. 36: *abstulerant oculi lumina nostra tui*. There is a remarkable application of this phraseology in two late writers, one of whom has probably copied from the other. Musæus, in his pretty little poem about Hero and Leander (vv. 90—98), thus describes the first access of love:

σὺν βλεφάρων δ' ἀκτῖσιν ἄεξετο πυρὸς ἐρώτων
καὶ κραδίη πάφλαζεν ἀνικήτην πυρὸς ὀρμῇ.
κάλλος γὰρ περίπυστον ἁμωμήτοιο γυναικὸς
ὀξύτερον μερόπεσσι πέλει πτερόεντος οἴστου·
ὀφθαλμὸς δ' ὁδὸς ἔστιν· ἀπ' ὀφθαλμοῖο βολάων
ἔλκος ὀλισθαίνει καὶ ἐπὶ φρένας ἀνδρὸς ὁδεύει.
εἶλε δέ μιν τότε θάμβος, ἀναιδείη, τρόμος, αἰδώς.

The same thoughts are expressed in prose by Achilles Tatius (*de Clitophontis et Leucippes amoribus*, I. 4): ὥς δ' εἶδον εὐθὺς ἀπολώλειν· κάλλος γὰρ ὀξύτερον τιτρώσκει βέλους καὶ διὰ τῶν ὀφθαλμῶν εἰς τὴν ψυχὴν καταρρέει. ὀφθαλμὸς γὰρ ὁδὸς ἐρωτικῷ τραύματι. πάντα δέ μ' εἶχεν ὁμοῦ, ἔπαινος, ἔκπληξις, τρόμος, αἰδώς, ἀναιδεία. It is possible that the sense of hearing conveyed by the cognate words κλύω, λύρα, Sanscrit *ç-ru*, &c., may have a similar origin. There is also some trace of an implication of the sense of seeing in the root *θαF-*, the primary meaning of which is motion or impulse. Thus, the words expressing astonishment, θαῦμα, τέ-θηπ-α-, θά-μ-βος, &c., are clearly connected with θάω, θαύω, and θεάομαι, "I gaze at."

479 Hesychius gives ὀργή the three following significations: τρώπος. μανία. θυμός, the order of which should, however, be reversed; for θυμός is the word which contains the primitive meaning of ὀργή. The ground-idea in both is the same, "an impulse" or "moving in any direction." The analogy between θυμός and ὀργή is farther observable in the application of the roots of both to the designation of sacred rites: that θύω and its derivatives are so applied, we have already seen, and the same may be said of ὄργια, ὄργεάν, ὄργιάζω. This meaning appears to be derived from the custom of holding out the hands or parts of the offerings to heaven (comp. εὐχετο χεῖρ' ὀρέγων εἰς οὐρανὸν ἀστερόεντα with *duplices tendens ad sidera palmas*, and σπλάγχνων μοῖραν ὄρεξον with *porrigit exta bovis*), just as *adoro* derives its meaning from the custom of turning the face to the sky. When ὀργάω is applied to vegetable productions, it refers to their "sprouting," "rising above ground," "moving upwards," and from this is deduced the sense of "ripe," "soft," which is found in ὀργάζω (compare the passage in Ruhnken's *Timæus*, under the words μετρίως ὀργασμένος, and ὀργᾶ). That this was the transition appears from the

conjunction of *πεπαίνεται* with *ὀργᾶ* in Herodotus (iv. 199): *ὁ ἐν τῇ κατυπεστάτῃ τῆς γῆς πεπαίνεται τε καὶ ὀργᾶ*. We do not agree with Passow in supposing that *σφριγᾶω* and *σπαργᾶω*, which are used as synonyms for *ὀργᾶω*, are etymologically connected with this word, but would rather connect them with *σφαραγέω*, *ἄσπαργος* (Attice *ἄσφαραγος*), and the German *Spargel*, *Sprosse*, and *spriessen*.

We have already adverted to the fact that as *ὀργή*, *ὀργᾶω*, which imply ripeness and fulness, are connected in meaning with *κόρος*, so *ὀρέγω* is connected through *rego*, *rex*, Sanscrit *râjâ*, with the political signification of the cognate *κύριος* (above, p. 556); and we have traced some of the trains of thought which are suggested by the names significant of rank, power, and royalty (§§ 333, 336—338). The root *reg-* in this application suggests some further comparisons of a very interesting nature. If *reg-num* and *rēg-ius* immediately refer to *rex*, it is equally clear that *reg-io* and *recta regio*, or *regio viarum*, point to the primary meaning of *reg-ere*, i. e. "to make a straight line," in which sense, as we have elsewhere suggested (*Gr. Gr.* p. 292), the root *O-PEI*, *O-PX*, or *E-PX* appears in *ἔ-ρχ-ουαι*, "I make a straight line for myself," "I go forward;" so that *rex*, after all, corresponds pretty nearly in origin and meaning to the Homeric *ὄρχαμος ἀνδρῶν*. The idea of dividing by *rows* and *roads* is connected with that of passage and direct progression; and in this sense we find the words *ὄρχος*, *ὄρχατος*, and *ὀρχέουαι*. Although the Sanscrit root *râj* is generally rendered *splendere*, we look upon this as a secondary meaning; for the word *râji*=*linea*, *series*, clearly points to the primitive and true signification of *ὀρχ-* and *rġ*. Some mention has been made above (§ 160) of the connexion between the Sanscrit *kshatra*, "a man of the military caste," Zend *ksathra*, and old Persian *khshâyathiya*, "a king." Rawlinson (*As. Soc.* xi. pp. 115 sqq.) reads the following words in the Persian cuneiform inscriptions: *khshatram* = *corona* v. *imperium*; *khshatra-pa*=*satrapes*; *khshayârshâ*=*ἑξέτης*, *Arta-khshatrâ*=*ἑξατάτης*; and *khshâyathiya*=*rex*. We refer all these words to a lost root *khsha*=*ka-ra*, which we regard as ultimately identical with *krî*, "to make," as well as with *kshi*, "to rule" (pres. *khshayâmi*); cf. *εὐρυκτεῖν* with *uru-kshaya* (Rosen, *Rig-Veda Specim.* p. xi); and thus *khsha-tram* may signify *reg-num*, *khshê-tra*, *regio*, whence *khshêtra-pa*=*regionis dominus* (above, §§ 160, 213); *khsha-tra*=*regius*, i. e. *miles*=*râja-purusha*, *khshaya*=*rex*, *khshây-a-thiya* for *khshây-anthiya*=*regens*, or *regentius*, and *khshay-ârsha*=*rex sanctus*, like the Sanscrit *râj-arshi*=*rex sanctus**. Now we have shown above the connexion in

* Benfey (*Keilinschr.* p. 79) and Oppert (*Journ. As.* xix. p. 174) compare *ârsha* with the Zend *arsna*, Sanscr. *akshu*, "oculus," and render *Khshayârshâ* by *König-seher* and *œil dominatrice*.

meaning of *ka-ra* and *ta-ra*, and how the latter root signifies "to bore a hole," "to pass over," &c. (§ 178), and how many contacts it has with *pa-ra*. We may therefore understand how *kshi* may signify not only *regere*, "to make a straight line through a country," but *per-ire*, or, with a causative affix, *perdere*, &c. (Bopp, *Gloss.* p. 93, ed. alt.). In the Semitic languages, the two principal words denoting sovereignty are מֶלֶךְ and בָּעַל. Fuerst is inclined to explain the former in the same way as Sanscrit scholars illustrate the root *rāj*, namely, by a reference to the idea of light and splendour: "Radix hujus verbi compositi est בָּעַל, לֹא (בָּלַע) vi *splendendi*; vis autem splendoris et excellentiæ ad *regnum* transfertur" (*Concord.* p. 635). It appears to us that the word is more truly referred to the root of מָלַא, πλήος, πολ-ύς, "full," which, through *pol-leo*, connects itself with *val-eo*, *validus*, and the Sanscrit *bala*=*vis*, *robur*, and, like βελ-τίων, *mel-ior*, expresses personal superiority. In the Tyrian language it seems to have dispensed with the affix ה- which distinguishes the word in Hebrew and Arabic: at least it is easy to explain Μελ-ί-καρχος, "the king of the city," מֶלֶךְ הַעִיר, in the same way as *Ab-i-melek* (above, p. 270), and in the Maltese inscription we have מֶלֶךְ הָעִיר (Gesenius, *Ling. Ph. Mon.* p. 96), where even the connecting vowel is omitted, and the same is the case in the well-known proper names *Ha-mil-car*, *Bo-mil-car*, &c. We do not connect with this root the other word בָּעַל, which is sufficiently distinguished from מֶלֶךְ in the inscription just mentioned, where we have the three quasi-synonyms in one address: לְאֱלֹהֵינוּ לְמֶלֶךְ הָעִיר בָּעַל צִיר "to our Lord, to the city-king, the superior of Tyre." It seems to us that בָּעַל is merely a prepositional compound indicating superiority in place, so that it corresponds to ἄνα-ξ from ἀνά: we have a perfectly analogous form in מֶלֶךְ. Æschylus, no doubt, when he makes the Persian Chorus address their king as βαλὴν (*Pers.* 663), was thinking of this word בָּעַל, which he had heard from Phœnician sailors. In the Scholiast, we must of course read *Τυρίων* for *Θουρίων*, though the word seems to have taken root in Phrygia also. We have discussed the etymology of the Egyptian word *Pharaoh* in the *Quarterly Review*, No. CLV. p. 168.

480 The meaning of ὀργή, when it denotes an emotion of the mind, is easily deduced from that of the verb ὀρέγω. In all cases it indicates "an upward striving," "a tendency to the surface," "an impulse," "a fancy," "a first impression," "a prominent desire." Hence we understand such phrases as ὀργὰς εὐμενεῖς κατασχεθεῖν (*Soph. Antig.* 1166), "to keep down their angry impulses, and so to make them gentle:" and we have the same idea in another passage of Sophocles, which has given the greatest trouble to the commentators.

Electra is excusing herself for the irrepressible outbreak of joy with which she welcomes her long-lost brother: she was silent, she says, when the false message of his death reached her, but she cannot contain herself now. The true reading and arrangement of the passage (Soph. *Electr.* 1281 sqq.) appear to us to be the following:

ὦ φίλαι [ἀνίκ'] ἔκλυον
 ἂν ἐγὼ οὐδ' ἂν ἤπις' αὐδάν,
 ἔσχον ὀργὰν ἄναυδον,
 οὐδὲ σὺν βοῶ κλύουσ',
 ἀ τάλαινα· νῦν δ' ἔχω σε· κ. τ. λ.

We think that ἀνίκ' has been absorbed by its similarity to the contiguous syllables φιλ[αιεκ]λυον, and with this insertion, there is no further difficulty in the passage.

The sense of "anger," which Hesychius assigns to ὀργή when he renders it μανία, is quite a secondary one; the transition is the same as in θυμός. The third meaning, τρόπος, is a very old application of this word (Hesiod, *Op.* 306). Whether it is derived from the connexion of will and character, which we have before pointed out, or by some transition to the meaning of ὀργάζω, similar to that which produced the words "humour" and "temperament," we cannot pretend to say. There is a singular passage of Thucydides (viii. 83) in which the word occurs in the plural number: πάντων τε Ἀστύοχον εἶναι αἴτιον, ἐπιφέροντα ὀργὰς Τισσαφέρνει διὰ ἴδια κέρδη. Dr. Arnold's translation of this phrase ("humouring," "supplying or ministering tempers such as a man likes") seems to show that he approved of the interpretation of the Scholiast, who says: τὸ ἐπιφέρειν ὀργήν ἐπὶ τῷ χαρίζεσθαι καὶ συγχωρεῖν ἔταπτον οἱ ἀρχαῖοι. μάρτυς Κρατῖνος ἐν Χείρωσι λέγων τὴν μουσικὴν ἀκορέστους ἐπιφέρειν ὀργὰς βροτοῖς σάφροσι. This passage of Cratinus, compared with the words of Thucydides, assures us that the interpretation of the Scholiast is incorrect. Besides, the change of number from ὀργὰς to ὀργήν entirely alters the meaning of the phrase; at least, St. Paul's expression (*Rom.* iii. 5), ὁ Θεὸς ὁ ἐπιφέρει τὴν ὀργήν, must, like that which is quoted from Polybius (*Leg.* 28), τὴν ὀργήν φέρει ἐπὶ τοὺς Αἰτωλοὺς, refer to the effects of anger (it is ἡ ὀργή in both passages); and with regard to the terms χαρίζεσθαι and συγχωρεῖν, it seems clear that the transitive phrase ἐπιφέρειν ὀργὰς could not signify to bring one's own disposition to suit that of another. It must mean, rather, to suggest some humours, dispositions or habits of mind to another, like ἐπιφέρειν δόξας (Plato, *Respublica*, x. p. 612 B). &c. Compare also the common phrases ἐπιφέρειν αἰτίαν, ψόγον, τιμωρίαν, &c., all of which imply an importation of something from without. From these

considerations, we conceive that Hanovius (*Exercit. in Com. Gr.* Hal. 1830, i. p. 60) and Meineke (*Fragm. Com. Gr.* ii. p. 157) have given to the phrase ἐπιφέρειν ὀργάς a meaning which could only have been extracted from the middle voice. The former, who renders the phrase in much the same way as Dr. Arnold—*voluntatem accommodare*, i. e. *obsequi*,—remarks, “quoniam ὀργή vel ὀργαί in cuiusque animo cernuntur, moveri et excitari possunt ab alio vel alia quadam re, afferri non possunt; quod si esset, extrinsecus ὀργαί petendæ forent”—which seems to us to imply a misconception respecting the meaning of the term ὀργή; and Meineke, who makes the fragment mean *musicam impense favere hominibus moderatis*, appears to have overlooked the obvious force of the passage, in which ἀκόρεστος, “restless,” “changeable” (above, p. 554), is opposed to σώφρων, “sober,” “contented.” Cratinus says, that music puts restless whims into the heads of sober-minded people: and Thucydides, that Astyochus was charged with suggesting caprices, or putting crotchets into the head of Tissaphernes: that he induced those whims which prevented the satrap from discharging his duty to the confederacy. That ὀργαί may be used in the plural after such a verb as ἐπιφέρειν, appears from Lysias (*de Cæde Eratosth.* p. 94): ὀργὰς τοῖς ἀκούουσι παρασκευάζουσι: and that it implies, when thus used, “habits of thought” or “a turn of mind,” may be seen from Soph. *Antig.* 354: ἀσυννόμους ὀργὰς, and from Thucyd. iii. 82: ὁ πόλεμος πρὸς τὰ παρόντα τὰς ὀργὰς τῶν πολλῶν ὁμοιοῖ. In the same way, θυμοί is used in the plural when the temper of one man only is spoken of; Sophocl. *Aj.* 716:

εὐτέ γ' ἐξ ἀέλπτων
 Αἴας μεταγνώσθη
 θυμῶν Ἀτρεΐδαις μεγάλων τε νεκρέων.

Heracleides, *Allegor. Homer.* 19: ἐπισκοτουμένου τοῦ κατὰ τὴν κεφαλὴν λογισμοῦ τοῖς περὶ τὰ στέφνα θυμοῖς. *Id.* 59: αἱ πρῶται τῆς ἱεσίας φωναὶ τοὺς ἄρσενας αὐτοῦ θυμοὺς ἐξεδήλυναν. These two passages are quoted by Lobeck (*ad Soph. Aj.* l. c. p. 488).

I. INDEX.

PASSAGES FROM GREEK AUTHORS, ILLUSTRATED, EMENDED, OR EXPLAINED.

[Unless it is otherwise specified, the numbers refer to the sections.]

Emendations are marked.*

	SEC.		SEC.		SEC.
ÆSCHINES:		- Choëph.	*73 sqq. .192	Prom.	265.....273
*c. Ctes. 543.....	395		272.....297		327.....174
ÆSCHYLUS:			*464.....472	Sept. c. Theb. 38.....	394
Agamem. 36.....	468		*489.....304		209..304, 325
	114.....95		*615.....290		232.....394
	118.....454		630.....174	*261.....	315
	176.....291		641.....310		365.....470
	237.....284		853.....472		394.....325
	267.....181	1000.....	436		417.....149
	363.....291	Eumen. 12—14.....	150		578.....450
	414.....478		36.....447		783.....312
	444.....174		113.....198	Suppl. init.	318
*494.....	422		*229.....218	*40.....	365
719.....	478		270.....218	*101 foll.....	469
722.....	297		*340.....365	577.....	454
*741 foll.	355		451.....218	610.....	472
760, 781.....	290		602.....297	672.....	297
768.....	410		910.....176	796.....	280
972.....	335	Persæ, 44.....	433	*848 foll.	475
1010.....	323		86.....473	*950.....	475
1077.....	174		120 ..469, 475	976.....	280
*1143.....	309		180.....164	1006.....	465
1198.....	310		239.....280		
1200.....	397		269 p. 455, note,	ARETÆUS: "	
1304.....	335		321.....242	p. 34.....	174
1460.....	436		343.....273		
1461.....	335		428.....315	ARRIAN:	
1507.....	202		815.....287	Anab. II. 11.....	315
		Prom. 90.....	459	v. 16.....	178

	SEC.		SEC.		SEC.
ARISTOPHANES:		<i>Alcest.</i> 605.....	325	HOMER:	
<i>Achar.</i> 253.....	303	<i>Bacch.</i> 340.....	394	<i>*Emend. var. loc.</i>	
640.....	461	639.....	395	pp. 219 sqq. 134	
835.....	175	701.....	218	<i>Iliad</i> I. 31.....	174
<i>Aves</i> , 1018.....	184	742.....	170	II. 673.....	302
1263.....	184	<i>Electr.</i> 712.....	297	IV. 323.....	297
<i>Equit.</i> 253.....	331	<i>Helen.</i> *1254.....	278	V. 893.....	154
280.....	305	1558.....	170	VI. 38.....	454
707.....	175	<i>Herc. Fur.</i> *863.....	437	179.....	472
890.....	154	<i>Hippol.</i> 525.....	478	X. 52.....	344
969.....	330	605.....	304	XI. 336.....	174
<i>Nub.</i> 466.....	395	*683.....	304	XIII. 82.....	325
1183.....	161	<i>Ion</i> , 235.....	175	359.....	174
<i>Pax</i> , 123.....	175	598.....	325	XVI. 329.....	472
559.....	164	<i>Iph. Aul.</i> 336.....	463	XVIII. 596.....	461
<i>Plut.</i> 66.....	202	584.....	478	XXIV. 226.....	462
545.....	198	<i>Iph. Taur.</i> 909.....	174	<i>Odyss.</i> I. 140.....	279
* <i>Thesm.</i> 372.....	721	1263.....	202	195.....	454
ARISTOTLE:		<i>Med.</i> 1141.....	149	V. 17.....	172
<i>Anima</i> , II. 1.....	340	1409.....	472	483.....	218
<i>Categor.</i> 1—5.....	125	<i>Phæn.</i> 650.....	318	VII. 107.....	461
<i>Eth. Nic.</i> I. 7, § 14.....	342	<i>Suppl.</i> 42.....	297	IX. 247.....	218
V. 4, § 9.....	290	282.....	279	XI. 588.....	163
5, § 6.....	290	<i>Troad.</i> 398.....	304	XII. 102.....	174
<i>Hist. Anim.</i> I. 1.....	174	HERODOTUS:		XIV. 311.....	472
<i>Interpret.</i> 1—5.....	125	I. 110.....	162	XV. 561.....	325
<i>Metaphys.</i> VIII. 6.....	341	II. 35.....	173	XVIII. 100.....	176
<i>Poet.</i> c. 4.....	304	60.....	149	XIX. 229.....	451
<i>Polit.</i> I. 6.....	174	75.....	182	*XXIII. <i>init.</i>	447
8.....	278	149.....	290	LONGINUS:	
II. 3.....	164	165.....	326	<i>Sublim.</i> 8.....	
IV. 8.....	327	III. 99.....	174	304	
V. 4.....	174	119.....	187	LYSIAS:	
<i>Rhet.</i> I. 10.....	454	IV. 33.....	178	<i>De Erat. Cæd.</i> 191. 464	
ATHENÆUS:		64.....	192	<i>*De Evan. Prob.</i> 176. 271	
p. 271.....	475	154.....	175	<i>c. Theomn.</i> § 10.....	
CALLIMACHUS:		199.....	479	PAUL:	
<i>Epigr.</i> 29.....	149	V. 9.....	82	<i>Coloss.</i> II. 15.....	
CORINNA:		18.....	478	177	
<i>Fr.</i> 21.....	133	58.....	101	PHILOSTRATUS:	
DEMOSTHENES:		VI. 11.....	454	<i>V. Herod.</i> 11.....	
<i>Callicl.</i> p. 1274.....	174	VII. 80.....	306	304	
* <i>Lacrit.</i> p. 929.....	433	140.....	473	PINDAR:	
<i>Steph.</i> p. 1128.....	315	159.....	187	<i>Isthm.</i> I. 62.....	
EURIPIDES:		164.....	273	*23.....	
<i>Æol. frag.</i>	218	VIII. 24.....	218	III. 23.....	
<i>Alcest.</i> 49.....	187	HESIODUS:		75.....	
252.....	283	<i>Theog.</i> 102, 528.....	297	V. 24.....	
305.....	175	319.....	472	VII. 35.....	
495.....	174	HESYCHIUS:		39.....	
		<i>Ξαλος, *ἐκούσα</i>	116	<i>Nem.</i> IV. 1.....	
		HIPPOCRATES:		*VII. 89.....	
		pp. 772, 783, 787.....		297	
		290		*VII. 89.....	
				186	
				<i>Olymp.</i> II. 23.....	
				184	

	SEC.		SEC.		SEC.
<i>Olymp.</i> II. 51.....	297	<i>Protag.</i> 428.....	258	<i>Antig.</i> 605.....	202
III. 4.....	461	<i>Resp.</i> 437.....	463	610.....	457
VII. 44.....	325	439.....	471	634.....	154
VIII. 20.....	291	444.....	174	662.....	290
XIII. 16.....	325	458.....	464	686.....	187
<i>Pyth.</i> I. 14.....	472	479.....	174	795.....	298, 478
50.....	290	538.....	464	857.....	167
III. 33.....	472	596.....	59	1050.....	277
44.....	180	603.....	291	1166.....	480
IV. 35.....	464	614 sqq. . .	85	1281.....	200
187.....	175	616.....	457	<i>Elect.</i> 43.....	395
202.....	335	617.....	444	120.....	447
263.....	186	<i>Soph.</i> 261.....	124	696.....	454
308.....	472	<i>Symp.</i> 145.....	306	934.....	192
V. 25.....	325	*175.....	139	*1281.....	480
99.....	304	<i>Theæt.</i> 145.....	306	<i>Ed. Col.</i> 71.....	218
101.....	305	168.....	184	112.....	311
VI. 13.....	281	<i>Tim.</i> 26.....	187	120.....	335
VII. 44.....	325	33.....	178	127.....	472
VIII. 21 foll. . .	291	SOLON:		<i>Ed. Tyr.</i> 2.....	472
40.....	470	p. 66.....	218	107.....	149
IX. 64.....	284	80.....	335	171.....	472
X. 58.....	273	SOPHOCLES:		207.....	457
81.....	281	<i>Ajax</i> , *135.....	304	316.....	305
XI. 32.....	310	158.....	455	328.....	394
<i>Fragm.</i> 47.....	102	455.....	454	526.....	301
150.....	171	496.....	317	874.....	335
PLATO:		511.....	180	1395.....	310
<i>Cratyl.</i> p. 391.....	60	550.....	187	1502.....	281
399.....	124	*572.....	304	<i>Ænom. fr.</i>	139
418.....	136	620.....	291	<i>Philoct.</i> 180.....	322
<i>Crito</i> , 43.....	154	693.....	57	511.....	472
<i>Euthyd.</i> 500.....	174	700.....	317	554.....	271
<i>Gorg.</i> 486.....	302	727.....	184	688.....	322
514.....	303	871.....	335	816.....	457
<i>Legg.</i> 701.....	271	890.....	187	1155.....	279
761.....	150	938.....	323	<i>Trach.</i> 568.....	176
773.....	289	1024.....	266	831 foll. . .	57
834.....	218	1096.....	326	THEOCRITUS:	
863.....	463	<i>ad fin.</i>	205	VII. 5.....	371
886.....	289	<i>Antig.</i> 29.....	279	XIII. 15.....	258
895.....	59	57.....	174	THUCYDIDES:	
902.....	455	109.....	174	I. 18.....	181
*905.....	344	114.....	298	22.....	187
959.....	176	145.....	174	36.....	305
<i>Meno</i> , 82.....	154	237.....	277	41.....	174
<i>Parm.</i> 133.....	174	251.....	281	44.....	174
<i>Phæd.</i> 247.....	290	292.....	290	69.....	192
249.....	57	360.....	305	71.....	454
251.....	57, 478	478.....	218	76.....	184
257.....	174	505.....	175	84.....	325
<i>Phileb.</i> 26.....	335	569.....	281	93.....	174
<i>Polit.</i> 299.....	463	594.....	305	123.....	184
302.....	271	600.....	218, 457	II. 41.....	187
<i>Protag.</i> 335.....	463				

	SEC.		SEC.		SEC.
II. 65.....	305	IV. 108.....	180	XENOPHON:	
70.....	174	*121.....	422	<i>Anab.</i> I. 9, § 17....	258
101.....	175	V. 46.....	254	IV. 5, § 35....	85
III. 21.....	302	*111.....	124	8, § 15....	229
24.....	135	VI. 3.....	371	<i>Cyrop.</i> II. 2, § 26....	290
36.....	200	16.....	454	III. 2, § 23....	174
62.....	59	22.....	475	V. 1, § 15....	279
67.....	291	89.....	192	VII. 5, § 21....	395
IV. 13.....	315	VIII. 83.....	480	<i>De re Equest.</i> VII. 11....	174
26.....	218	85.....	174	<i>Hellen.</i> I. 2, § 16....	315
28.....	273	*92.....	271	II. 4, § 31....	271
85, 86.....	304			<i>Mem.</i> III. 14, § 2....	175
95.....	395			8, § 1....	174

II. INDEX.

GREEK WORDS ILLUSTRATED OR EXPLAINED.

- | | | |
|---------------------------|---------------------------|----------------------------|
| ἀ negative, 184 | αἰχμή, 174 | ἀμφοτέρως, 273 |
| ἀ intensive, 185 | αἶψα, 513, 436 | ἄν, 184, 186 |
| ἀβληχρός, 212 | ἄκαιρος, 290 | ἄνά, 184 |
| ἄβολος, 218 | ἀκήδεια, 185 | ἄναξ, 275, 334 |
| ἀγαθός, 322 | ἄκοιτις, 181 | ἀνδροφθόρος, 309 |
| ἀγάλακτες, 181 | ἀκόλουθος, 181, 213, 223 | ἀνεκός, 184 |
| ἀγαμαι, 323 | ἀκόρεστος, 335 | ἀνευ, 204 |
| ἄγαν, 203 | ἄκορος, 335 | ἀνέχω, 186 |
| ἀγανρός, 323 | ἀκταίνω, 447 | ἀνέψιος, 181 |
| ἀγρός, ἄγριος, 150 | ἀλείφω, 213 | ἀνήνοθεν, 336 |
| ἀγνιά, 296, 414 | ἀληθινός, 258 | ἀνῆρ, 333 |
| ἄγχιςτος, 284 | ἀλλήλων, 167, 173 | ἀνθος, 334 |
| ἀδελφός, 181, 286 | ἄλλος, 138, 166, 215, 268 | ἄνις, 204 |
| ἀδρεπίβολος, 305 | ἀλλότριος, ἀλλότερος, 157 | ἄντα, 171 |
| ἀδρός, 336 | ἄλογος, 181 | ἀντί, 171 |
| ἀειγενέτης, 254 | ἄλφειν, ἄλφεισβoια, 475 | ἄντρον, 267 |
| ἄέλιος, 181 | ἄλφεισβoιαν, 220 | ἄοζος, 181, 262, 286 |
| ἄέναιος, 270 | ἄλώπηξ, 254, 455 | ἄοσσεω, ἄοσητήρ, 262, 286, |
| ἄήρ, 199 | ἄμα, 181 | ἄπάλαμνος, 218 |
| Ἀγιαλεῖς, 97 | ἄμαιμάκετος, 472 | ἄπαμβλύνομαι, 218 |
| αἶγλη, 457 | ἄμαλός, 218 | ἄπαξ, 154 |
| αἶγλητής, 457 | ἄμαρύσσω, 213 | ἄπατορία, 181 |
| αἰδώς, 257 | ἄμανρός, 218 | ἄπό, 138, 177 |
| αἰεῖ, 188 | ἄμάω, 218 | ἄπο, 184 |
| αἰζήρος, 265 | ἄμβλῦς, 218, 460 | ἀποδύομαι, 177 |
| Αἰθίοψ, 95 | ἄμβιβω, 213 | ἄποινα, 212 |
| αἰῶν, 223 | ἄμείνων, 262 | ἄποκαλέω, 184 |
| αἰλουρος, 455 | ἄμέλγω, 212 | ἄπολαύω, 453 |
| αἰμοσταγής, 312 | ἄμενηρός, 335 | Ἀπόλλων πατρώος, 459 |
| αἰνώ, 436 | ἄμεργω, 213 | ἀπόφνηι, 184 |
| Αἰολεῖς, 97 | ἄμενσασθαι, 213 | ἄπτερος, 181 |
| αἰόλος, 97, 266 | ἄμενσίπορος, 213 | ἄπτω, 318 |
| αἰρέω, 269 | ἄμμες, 136 | ἄρα, 192 |
| αἶσα, 436 | ἄμυνω, 262 | ἄρεσκω, 285 |
| αἰσχος, αἰσχύνη, 219, 325 | ἄμφι, 172 | ἄρετή, 174, 285 |
| αἰσχροός, 324 | | |

- ἀρήγω, 285
 ἄρης, 285
 ἀριθμός, 272
 ἀρισθάρματος, 309
 ἀριστερός, 272, 285
 ἀριστος, ἀριστεύς, 285
 322
 ἀρκέω, 285
 ἄρπάζω, 269
 ἄρπυια, 296, 414
 ἄρῳ, ἄρσην, 285
 Ἀρταξέρξης, 160, 479
 ἀρχαῖος πλοῦτος, 12
 ἀρχαῖος and παλαιός, 12
 ἀσάλλη, 461
 ἀσελγής, 461
 ἀσκελές, 185
 ἄσκος, 213
 ἀσμεναίτατα, ἀσμενέ-
 τατα, ἀσμενώτερος, 166
 ἄσμεν, 136
 ἀσπάζομαι, 213
 ἀσπάραγος, 212, 213
 ἀσπερχές, 185
 ἄσπις, 213
 ἄσταχυς, 213
 ἄστηρ, pp. 160, 395
 ἀτάλαντος, 181
 ἀτάλλω, ἀτιτάλλω, 344
 ἄταρ, 138
 ἄτε, 197
 ἀτενής, 185
 ἄτερ, 204
 ἀτίτης, 254
 ἄτιω, 437
 Ἀττική, 97
 αὐ, αὐθις, 138, 189
 αὐερώω, 189
 αὐν, 189
 αὐρα, 198
 αὐτάρ, 138
 αὐταντος, 138
 αὐτίκα, 196
 αὐτοκτονέω, 173
 αὐτόματος, 472
 αὐτός, 138, 303
 ἀφαιρούμαι, 315
 ἀφοιβαντος, 218
 Ἀφροδίτη, 247
 Ἀχαιός, 97, 322
 Ἀχελῷος, 270
 ἄψ, 169

 βαγός, 254
 βαθνχαιός, 475
 Βάκχος, 110

 βαλὴν, 479
 βάλλω, 110, 436
 βάνη, 133
 βάναντος, 326
 βαρβαρόφωνος, 88
 βασιλεύς, 254
 βείομαι, 378
 βέλτερος, βελτίων, 262
 479
 βίαιος, 291
 βιάξ, 218
 βλάπτω, 454
 βλέπω, 452
 βληχρός, 218
 βλώσκω, 218
 βοή, 284, 470
 βοηθέω, 284
 βύλλη, 466
 βόσπορος, 310
 βοῦα, 466
 βουλή, 466
 βούλομαι, 462, 466
 βουνός, 469
 βούπαις, 466
 βοῦς, 284, 470
 βοῦς ἐπὶ γλώσση, 468
 βουσά, 466
 βούχιλος, 466
 βράψαι, 454
 βρέφος, 432, 473
 βρώω, 432, 473
 βῶμος, 469

 γαθιάδας, 323
 γαῖα, 323, 470
 γάλα, 213, 459
 γαλήνη, 459
 γαμβρός, 217
 γάνος, 323
 γάρ, 204
 γαυρός, 323
 γδοῦπος, 209
 γε, 203
 γε δῆ, 203
 γέλα, 459
 γέλασμα κυμάτων, 459
 γελάω, 459
 γελέοντες, 459
 Γέλων, 459
 γενέτης, 254
 γενναῖος, 323
 γέντο, 272
 γεραίρω, 297
 γεραρόν, 297
 γεραρός, 297
 γέρας, 297

 γερόνιος, 297
 γέων, 297
 γέφυρα, 298
 γῆ, 121, 323, 470
 γῆρας, 297
 γλευκός, 461
 γλευσσώ, 452
 γλήνη, 452
 γνωστήρ, 567
 γομφόδετος, 475
 γυνός, 121, 410
 γυνή, 133

 δάκρυ, 212
 δάκτυλος, 162
 Δαμάσιππος, 314
 δασύς, δανυλός, 474
 δέ, 155
 δέικναι, 271
 δεινός, 255, 268, 324
 δείς, 156
 δέκα, 161, 162
 δέκομαι, 161, 271
 δέμας, 290
 δέξιος, p. 301, § 292
 δέομαι, 155
 δέρω, 152, 262, 269
 δασμός, 253, 474
 δέσποινα, 228
 δεσποσιοναύτης, 475
 δεσπόσιος, 475
 δεσπότης, 228, 474
 δέω, 155
 δέω, 155, 180
 δῆ, 201
 δῆθεν, 202
 δῆλος, 265
 δῆμος, δημός, 253
 δημόσιος, 298
 δῆν, 202
 δῆτις, 156
 διά, 180
 δίαται, 180
 διαμάω, 218
 διαπρόσιος, 150, 460
 διατελῶ, 445
 διατροχάζω, 174
 διαφέρωμαι, 180
 διδάσκω, 219
 δίδυμος, 180
 δίζω, 180
 διθύραμβος, 317
 δικαιοπολις, 291
 δίκαιος, 290
 δίκη, 289
 διοπύω, 433

δίοπος, 433
 διοπτρεύω, 433
 δίπλαξ, 280
 δῖς, 155
 δίσκος, 219
 Διοσκήριον, 318
 διωλύμιος, 460
 δολιχός, 209, 344
 δονπέω, 475
 δραπέτης, 164, 432
 δράχμη, 174, 477
 δράω, 164, 432
 δρόμος, 164, 432
 δύναμαι, 262
 δύναμις, 323
 δυς-, 180
 δυσσθήσκω, 437
 δυσμενής, 180
 δύσσφρα, 297
 δύω, 155, 180
 δώδεκα, 159
 Δωριείς, 92

εἰ, 140
 ἐγρήγορα, 221
 ἐγών, 133, 203, 275
 ἔδομαι, 383, 467
 ἐέλδομαι, 463
 ἐέρση, 116
 ἔξω, εἶσα, ἔσω, 475
 ἐθέλω, 463
 εἰ, 139
 εἰ ποτ' ἔην γε, 205
 εἶα, pp. 237, 251
 εἶδος and } 59
 ἰδέα,
 εἴθε, 202
 εἵκατι, 162
 εἴλω, 228
 Εἰλείθυια, 296
 εἶν, 139
 εἴνεκα, 277
 εἰς, 170
 εἰς, 154
 εἶσα, 475
 εἰσορῶ, 279
 εἵτα, 169, 202
 Ἐκάβη, 276
 Ἐκάλη, 276
 Ἐκαμήδη, 276
 ἐκάς, 273
 ἔκατι, ἔκητι, 273
 ἔκατόν, 162
 ἔκατος, ἐκάτη, ἐκάτερος,
 273
 ἐκεῖνος, 135

ἐκδύομαι, 177
 ἐκηβόλος, 273
 ἐκηλος, 116, 273
 ἐκθνήσκω, 176
 ἐκυρός, 110
 ἐκφέρω, 176
 ἐκφορώτερος, 176
 ἐκάν, 273
 ἐλαύνω, 223
 ἐλαχύς, 132
 ἐλεύθερος, 212
 ἐλευθιά, 296
 ἐλέφας, 296
 ἐλκεσίπεπλος, 314
 ἔλω, 464
 Ἑλληνες, 92
 Ἑλπινίκη, 312
 ἔμβρον, 473
 ἔμωτος, 472
 ἔμολον, 218
 ἐν, 170
 ἐνδατοῦμαι, 178, 450
 ἐνδελχής, 344
 ἐνεκα, 272
 ἐνέργεια, 340
 ἐνίσσω, ἐνίπτω, 216
 ἐννεα, 161
 ἐννος, 161
 ἐννυμι, 215
 ἐνος τε καὶ νέος, 161
 ἐντελέχεια, 340
 ἐντος, 164
 ἐξ, 176
 ἐξ, 160
 ἐξαιθραπένω, 160, 213
 ἐξαίφνης, ἐξαπίνης, 215
 ἐξίσταμαι, 315
 ἐπάγω, 174
 ἐπαλλάσσω, 174
 ἐπάλληλος, 174
 ἐπαμάω, 218
 ἐπαμείβω, 174
 Ἐπαμεινώνδας, 262
 ἐπαμφοτερίζω, 174
 ἐπαρκῶ, 284
 ἔπεα πτερόεντα, 126
 ἔπειτα of present time,
 202
 ἐπεργασία, 174
 ἐπεσελεθεῖν, 175
 ἐπητύς, 254
 ἐπί, 172
 ἐπιγαμία, 174
 ἐπίηρος, 285
 ἐπιθεάζω, 472
 ἐπιμαχία, 174
 ἐπιμίξ, 254

ἐπινέω, 174
 ἐπινομία, 174
 ἐπιραβδοφορῶ, 174
 ἐπιφέρειν ὄργας, 480
 ἐπίχαρτος, 297
 ἐπίχειρα, 174
 ἐπιχρῶμαι, 174
 ἐποίχομαι, 174
 ἐπτά, 160
 ἐρείπω, 160, 212
 ἐρεμβός, 317
 ἐρετμός, 253
 ἔρις, 115
 Ἐρμῆς, 114
 ἔρῶ, 209
 ἐρχομαι, 479
 ἐσθία, 383
 ἐσθλός, 217
 ἐσπέρα, 150
 ἔστε, 198
 ἔσω, 475
 ἔτερος, 144
 ἔτι, 169, 193
 εὖ, 160, 199
 εὐεστά, 254
 εὐήκοος, 469
 εὐίος, 473
 εὐκήλος, 116, 275
 εὐμαρής, 450
 εὐρηχαρία, 273, 280
 εὖς, 199
 εὐχομαι, 199
 ἐφιάλλω, 110
 ἐφιάλτης, 317
 ἐφ' ᾧ τε, 197
 ἔχις, 146
 ἔως, ἐώς, 257

ζάλη, 110
 ζαμενής, 180
 ζάχρυσος, 180
 ζάω, 110, 216
 ζεά, 216
 ζεύγος, 180
 Ζεύς, 202, 216
 ζυγγίβερι, 216
 ζυγόν, 136, 216
 ζώή, 180

ἦ, ῆ, ῆ, ῆ, &c. 199, 200
 ἦβη, 329, 336
 ἦδη, 201
 ἦδύς, 199
 ἦήρ, 199
 ἡλικιάη, 116

ἤλεκτρον, 116
 ἡμάτιος, 298
 ἡμεῖς, 136
 ἡμέν—ἡδέ, 201
 ἡμέρα, 150
 ἡμερήσιος, 298
 ἡμερος, 150
 ἡμι, 199, 436
 ἡμισυ, 150
 ἦν, ἡνίδε, 193
 ἡνίκα, 196
 ἦνοψ, 95
 ἦπαρ, 150
 ἥπιος, 150
 ἥπειροπύς, 254
 ἥπύτης, 475
 Ἡρα, 329
 Ἡραῖος, Ἡρφαῖος, 329
 Ἡρακλῆς, 329
 ἦρας, 329, 414
 ἦς, 199
 ἦχη, 199

θάλασσα, 110, 473
 θάμβος, θαῦμα, 318, 478
 θε, 202
 θέαινα, 228
 θεάω, 478
 θέλω, 464
 θέλεμος, 465
 θέλω, 463
 θέναρ, 450
 θεός, 473
 θεόσδοτος, &c. 310
 θερίζω, 450
 θεσμός, 253, 474
 θέσπις, θεσπρωτός, θέσ-
 φατος, &c. 310
 θέω, 473
 θήγειν, 473
 θήρ, 110
 θήτες, 473
 θίασος, 318
 θιάζω, 472
 θοίνη, 474
 θοός, 473
 θόρυβος, 272, 318
 θοῶξ, 92
 θοράσσω, 272
 θορίαμβος, 317
 θοῖναξ, 318
 θοῖνια, 318
 θοῖον, 318
 θύελλα, 477
 θυμέλη, 476
 θυμός, 471

θύμος, 476
 θυμούσθαι εἰς κέρας,
 170
 θυρός, 318
 θῶκος, 472
 θώσασθαι, 474

ζ, ζ, 139
 ζα, ζα, 154
 Ίακος, 110
 ιάλλω, 110, 318
 ἱαμβος, 317
 ἰάπτω, 317
 ἰγνητες, 139
 ἰδιος, 139, 166
 ἰδοῦ, 193
 ἰδρώς, 110, 167
 ἱκανός, 116
 ἱκέτης, 318
 ἱκταρ, 475
 ἴν, 139
 Ἰπποδάμουν, 220
 ἱππόορημνος, &c. 468
 ἱππομανής, 466
 Ἰππομυέδοντος, 220
 ἴππος, 110
 ἱρις, 464
 ἰσαίος, ἰσαίτερος, 167
 ἴσκε, 219, 434
 ἴσος, 152
 ἴσχω, 219
 ἴνγξ, 464
 ἰών, 133
 -ἰων, 165

κά, 186
 κάδμος, 267, 473
 καθάρως, 267
 καί, 186, 195
 καί ταῦτα, καί τοι, 198
 καιρός, 171, 290
 κακογείτων, 322
 καλέω, 209
 κάλλος, καλλοσύνη, 258
 καλονάγαθος, 321
 καλός, 324
 κάλυξ, 254
 Κάλχας, 296
 κάμαξ, 286
 κάρπος, 162
 κατά, 182
 καταιδύσσω, 458
 καταρτύνω, 218
 κατασφημι, 184
 καταγορία, 125

κατηρτυκός, 218
 κανυός, 163
 κεύθεν, κεύθι, 186
 κεύρος, 135, 138
 κεν, 186, 195
 κέντο, p. 298
 κέρας, 209
 κεφαλή, 216
 κεχλάδων, 336
 κισσοδέτης, 254
 κλυτός, 212, 478
 κλύω, 209
 κμῆλεθρα, 121
 κόθεν, 182
 κολικνος, 336
 κόλπος, 458
 κολώνη, 410
 κομμά, 215
 κόμπος, 317
 κόπτω, 317
 κόρος, 335
 κορύς, 216, 262
 κορυφή, 216
 κόσμος, 215, 267, 473
 κόττατος, 216
 κουρίδιος, 330
 κραίνω, 83, 479
 κραιπνός, 160
 κρεισσότεκνος,
 -τέκνης, 312
 κρηδέμων, 410
 κρήνη, κροῦνος, 176, 255
 κτείνω, 208
 κυβεργάω, 216
 κύκλωψ, 154
 κύπτω, 216
 κύρβας, 331
 κυρήβια, 331
 κύριος, 330
 κύων, 110, 162

λᾶας, 455
 λαβύρινθος, 263, 453
 λαγγάνω, 209, 216, 453
 Λαέρτης, 332
 Λαῖς, 455
 λαμβάνω, 453
 λαμπρός, 452
 λάσκω, 219, 387
 λάω, 451
 λέαινα, 228
 λέγω, 453, 455
 λεία, 455
 λειποταξία, 314
 λείπω, 223
 λείχω, 223

λέξις, 125
 λέσχη, 219, 453
 λευκός, 269, 456
 λεύς, 452
 λεύσσω, 452
 λέχος, 453
 λέων, 455
 λεωργός, 313
 λήϊς, λαΐς, 455
 λίθος, 455
 λίπα, 272
 λιπαρός, 456
 λογάδην, 455
 λόγος, 124
 λόγω-παλαιός, 310
 λοξίας, 154
 λοξός, 154
 λούω, 270
 λυκάβας, 269
 λύναινα, 228
 λύκειος, 269
 λύκη, 269
 λυμαίνομαι, 305
 λυμεάν, 305
 λύρα, 478
 λυτήριον, subst., 297

μά, 135, 189
 μάλα, 185
 μάλλον, 165
 μανθάνω, 209
 μαραίνω, 218
 μάση, 450
 μαρῆγει, 454
 μάρμαρος, 95, 457
 μάρπτω, 454
 μάρτυρ, 450
 μαυρός, 218
 μάω, 135, 224, 472
 με, 132
 μέγεθος, μέγιστος, 167
 μέδιμνα, 450
 μέθεν, 134
 μεθήμι, 475
 μειδιάω, 199
 μείς, 154
 μέλας, 121
 μέλει, 472
 μέλλω, 448, 450
 μέλος, 178
 μέλπω, 458
 μέμβλεται, 217
 μέμβλωκα, 217
 μέν, 154
 μένω, 472

μεοί, μέος, 134
 μέριμνα, 410
 μερμηρίζω, 410, 450
 μέρος, 178, 450
 μέρωψ, 95
 μεσίτης, 450
 μέσσος, 166, 450
 μετά, 130, 181, 450
 μέταξ, 202, 265
 μετέωρος, 173
 μέχρι, 181
 μή, 189
 μήν, 189
 μηνύω, 269
 μητροκτόνος, 313
 μητρυνά, 414
 μία, 154
 μιν, 135
 μόγις, 167
 μόλις, 185
 μόνος, 154
 μόσχος, 219
 μόχθος, 383
 μύριοι, μύρω, 163

ναί, 189
 ναῦς, 216
 νέμειν τὸ ἴσον, τὰ ἴσα,
 454
 νεσίγαλος, 461
 νέω, 216
 νή, 189
 Νηρεύς, 95, 216
 νήριτος, 95, 185
 νῆσος, 216
 νίκη, 216
 νίζω, 216
 νίπτω, 216
 νιφάς, 199
 νόστος, 136, 164
 νόσφι, 136
 νυ, νῦν, 192
 νυός, 199
 νῶϊ, 136
 νῶροψ, 95

ξέννος, 215
 ξένος, 176
 Ξέρξης, 160, 479
 ξέω, 221, 432, 436
 ξίφος, 221, 432, 436
 ξύν, 181
 ξυνός, 181
 ξύω, 433

ὁ, 137
 "Οἶξος, "Οασίς, οἶστρος,
 &c. 110
 ὄγδοος, 164
 ὀδδ, 156
 ὀδε, οὔτος and κείνος,
 135
 ὀδδεια, 156
 ὀδοῦς, 132
 Ὀδυσσεύς, 115, 167
 ὀθιόνεια, 277
 οἶδα, 110
 οἰκητής, οἰκήτωρ, 267
 οἶνη, οἰνίζω, 154
 οἶνος, 110
 οἶος, 152
 οἶός τε, 197
 οἶσθα, 110, 353
 ὀκτώ, 159
 ὀλβαχίον, 116
 ὀλβος, 116
 ὀλιγιστος, ὀλιγοστός, 164
 167
 ὀλλυμι, 215
 ὄλος, 116
 ὄμβρος, 217
 ὀμόσπορος, 313
 ὀμῶς, 247
 ὄνειδος, 212
 ὄνομα, 124, 132
 Ὀξάθρης, 160, 213
 ὀπλίτης, 259
 ὄπλον, 259
 ὀπτομαι, ὄσσομαι, 216
 ὀπνίω, 213
 ὄπως, 196
 ὀράω, 209
 ὀργή, ὀργέω, 479
 ὀργνία, 296, 414
 ὀρέγω, 477
 ὀρθόπους, 315
 ὀρμαθός, 383
 ὄρνις, 262
 ὄρος, 174
 ὄρχαμος, 479
 ὄρχησις, ὄρχησμός, ὄρ-
 χηστὺς, 254
 ὄς, 148, 243, 300
 ὀσάπτω, &c. 213
 ὀσον τε, 197
 ὄσος, 152
 ὅτε, &c. 197
 οὐ, οὐκ, 96, 176, 189
 οὐ μή, 394
 οὐδεῖς, 156
 οὐθεῖς, 156
 οὐκ—ἀλλά, 201

Ὀυκαλέγων, 189
 οὖν, 189
 οὔνεκα, 277
 οὐρανός, 259
 οὖς, 189
 Οὔτις, 189
 Οὔτοπία, 189
 οὗτος, 135, 138
 ὄφρα, 196
 ὄφρ'ύς, 132
 ὄχλος, 221

παιδεία, 4
 παῖς, 262
 παλαιόπλουτος, 12
 παλαιός and ἄρχαῖος, 12
 παλαιός, 298
 παλαιφάτος, 315
 παλίγγλωστος, 88
 παλίμβαμος, 174
 πάλιν, 264
 πανός, 199
 πανοῦργος, 313
 παοί, 262
 παρά, 177
 Παρθεννοπαῖος, 220
 παρθενών, 260
 παριπνεύω, 178
 πάρος, 171
 πᾶς, 265
 πάσχω, 114, 219, 434
 πατριός, πατρῶς, &c.
 414
 πεδά, 158
 πείρω, 178
 πέλαγος, πελάγιος, 280
 πελαγός, 195
 Πελασγός, 95
 Πέλοψ, 95
 πεμπάξω, 161
 πένθος, 114
 πέντε, 161, 162
 πεπαρεῖν, 178
 πέπονθα, 441
 πέραν, πέρσι, 177
 περῶν, 178
 πέρθω, 382
 περί, 177
 περιπετής, 178
 περιπέτω, 289
 περιτριμπα, 475
 πέριπρος, 178
 περφερέες, 178
 πέσσω, 216
 πέτορες, 158
 πέτρα, πέτρος, 15, 229

πηλίκος, 152
 πικρός, 218, 266
 πίομαι, 383, 467
 πίπτω, 431
 πλαγκτός, 280
 πλάξ, 280
 πλέω, 270
 πληγή, 199
 πλην, 200
 πόθεν, 202
 ποιέω, 213
 ποιήμα, 410
 ποικίλος, 266
 ποιικλοστικτός, 266
 ποιμήν, 133, 256, 410,
 436
 ποιμή, 410
 πολίτης, πολίτης, 259
 πολλοστός, 164
 πολύς, 479
 πόλχος, 221
 πορεύματα, 218
 πορθμός, 254
 ποστός, 164
 ποτμός, 253
 πότνια, 228, 474
 πράγος, πράγμα, 224,
 256
 πρό, πρός, προτί, ποτί,
 171, 177
 προβατογνώμων, 410
 προστρέπομαι, 218
 προουσεῖν, 461
 πρύλλες, 154
 πρωϊζός, 216
 πτώσις, 227
 πυρρός, 318
 πῶ, πῶμαλα, 202

ῥα, 202
 ῥάβδος, 174
 ῥέπω, 477
 ῥέω, 270, 477
 ῥήμα, 124
 ῥίμφα, 477
 ῥίπτω, 160, 477
 ῥυθμός, 253
 ῥυμός, 253
 ῥυσμός, 474

σαίνω, 473
 σάλασσα, 461
 σαλασσομέδοισα, 461
 σαρκῶ, 475
 σατράπης, 160, 213, 475

σαφής, 181
 σε, 132
 σέβω, 473
 σεισμός, 253
 σέλας, 461
 σελήνη, 461
 σεύω, 473
 σημαίνω, 436
 σίαλος, 222, 461
 σιγαλοεῖς, 461
 σίος, 473
 σκάλλω, 387
 σκέλος, 387
 Σκαπτησύλη, 114
 σκήνη, 410
 σμικρός, 199
 σοῦμαι, 473
 σπάκκ, 110
 σπλάγγνον, σπλήν, 255
 σπονδή, 223
 σταδιοδρομέω, 437
 στενοχωρία, 280
 στέρωψ, 95
 στόρνυμι, 223
 σύ, 133
 σύν, 181
 συριγενής, 473
 σύριον ἔρμα, 473
 σφάλλω, 209
 σφάτερος, 142
 σφήξ, 142, 221
 σφός, 142
 σφῶν, 136
 σχεῖν, 434
 σῶκέω, 447
 σῶκος, 447

ταμίας, 262, 440
 τάν, 132
 τᾶς, 272
 τε, 149, 186, 195
 τεθμός, 474
 τείνω, 209
 τελείος, τελειόω, 218
 Τελλεύταντος, 220
 τέλος, 178, 342
 τέμενος, 267
 τεοϛ, 133
 τέρθριος, 318
 τέρμα, 187
 -τέρος, affix, 157
 τέρω, τρέπω, τρέφω,
 440
 τέσσαρες, 146, 158
 τφε, 132
 τήλε, &c 344

τηλέβολος, 437
 τῆλιξ, τηλίκος, 152
 τηλύγετος, 344
 τῆμος, 202
 τηνίκα, 196
 τίθημι, 347
 τιούχαν, 223
 τις, 149, 156
 τὸ τί ἦν εἶναι, 192, 344
 τοι, τοίγαρ, τοίνυν, 198
 τόν, 132
 τόρος, τόρονος, 178
 τόςος, 152
 τούν, 133
 τραῦμα, 178
 τραφερός, 344
 τρεῖς, 157
 τριπόλιςτος, 167
 τριτύες, 154
 τρόπος, 290
 τρύω, 178
 τυγχάνω, 445
 τυμβόχωστος, 309
 τυρβασία, 318
 τύρβη, 318

ὑάκινθος, 464
 ὕβρις, 335
 ὕδωρ, 167, 223
 υἱός, 167
 ὕλη, 114, 340
 ὕμεις, 136
 ὑπέρ, ὑπό, 178
 ὑπερακταῖνα, 447
 ὑπερφίαλος, 139
 ὕπνος, 110
 ὑποφάνσεις, 152
 Ὑδῶάδιος, 262
 ὕσμινη, 136

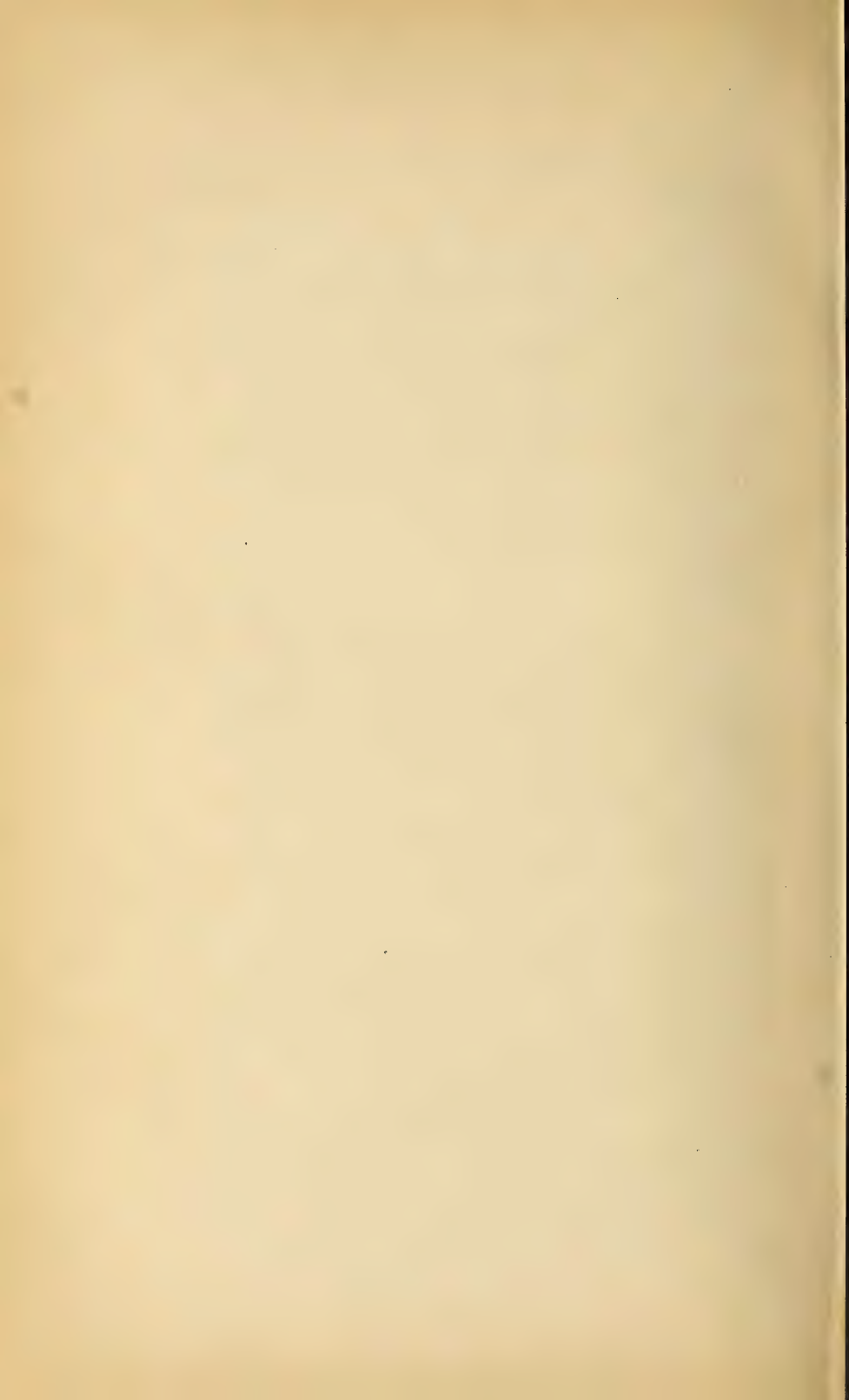
φαινόμεναι, 314
 φαίνω, 460
 φανός, 199
 φάος, 152, 460
 φασέτρα, 440
 φάροςος, 199
 φάσανον, 221
 φανῦλος, 152, 327
 φή, 199
 φημί, 209, 460
 φθάνω, 445
 φιάλλω, 110
 φοῦσα, p. 249, note
 φρίσσω, 218, 288
 φροίμιον, 102
 φροῦδος, φρουρός, 272
 φυνίω, 377
 φυλάσσω, 176
 φύλλον, 165
 φύω, 133, 167
 φωνή, 88, 110, 199
 φώς, 257

χαίνω, 280
 χαίρω, 288, 445
 χανδάνω, 280
 χάος, 280
 χάος, 322
 χαρακτήρ, 286
 χάραξ, 286
 χαράσσω, 286
 χάριν, 278
 χάρις, 291
 Χάριτες, 291
 χάρις, 288, 325
 χαροπός, χάροψ, 282
 χάρυβδις, 282
 χάρων, 282
 χεῖλος, 163, 280

χείρ, 162, 28
 χείρων, 262
 χεράς, 281
 χέρμας, 281
 χέρσος, 281
 χέω, 163
 χέω φθόγγον, αὐδάν, 469
 χῆρος, 287
 χθές, 150
 χθιζός, 216
 χίλιοι, χιλός, 163
 χλάζω, 336
 χληδός, 336
 χλιδή, 336
 χοιράς, 281
 χοῖρος, 281
 χορός, 280
 χραισμέω, 284
 χράομαι, 287
 χραύω, 281
 χρεία, 284
 χρήσιμος, 284
 χρίμπτω, 281
 χρόνφ-κλυτός, 310
 χώρα, χῶρος, χορός, 229,
 280

ψάλιον, 221
 ψάλλω, 432, 436
 ψε, 144
 ψιν, 221

ᾠκός, 473
 ᾠλαξ, 116
 ᾠμος, 116
 ᾠς, 170
 ᾠστε, 197
 ᾠ τάν, 133



III. INDEX.

MISCELLANEOUS MATTERS.

- ABSTRACTION, 55
ac and *atque*, 194
Acts of the Apostles, xvii.
 26; 15
 Adelung (J. C.), 36
adoro, 479
æger, *ærumna*, 410
 Agrippa (H. Cornelius),
 52
Airyamen vaêjô, 81, 85
 Algebra, 55
aliquis, *quispiam*, *quis-*
quam, 199
alius, 135, 138
almus, *alumnus*, 253, 410
 Alphabet (Indian), 105,
 note
 "and," 194
 Annakus, 66
 Anquetil du Perron, 35
 Antecedent, indefinite,
 300
 Arabic Alphabet, 104
arcesso, &c. 382
 Architectural writing, 45
 Ariana, 81
Ariarathes, 81
Ariomardus, 213
 Armenia, 64, 85
 Arnold (Dr. T.), 32, 305,
 396, 480
Arya-âvartah, 81
 Ascham (R.), 25
Askenaz, 76
 Association of ideas, 53
auctumnus, 410

Babel, 45
 Basque or Euskarian
 language, 79
 Behistun Inscription, 13,
 37, 107, 110, 133, 149,
 194, 344, 479
 Belooch, 81
 Benfey (Dr. Theodor),
 168, p. 696
 Bentley (Dr. R.), 28, 110,
 pp. 219 sqq.
 Berkeley (Bishop), 57
bes, 155
 Bibliolatry, 13
 Blomfield (Bishop), his
 ingenious emendation
 of *Matreas*, 286
 Bohemia, 79
 Bopp (F.), 39
 — strictures on, pp.
 259, 344, 370, 401,
 404, 424, 435, 444,
 465, 473, 585 sqq.,
 594, 597 sqq., 608 sqq.
bruma, 150
 Budæus (W.), 24
 Buddhists, 84
 Budenz (J.), p. 453
 Bunsen, (C. C. J.), 10, 15,
 30, 37, 48, 208
 Burnouf, E. (36, 108),
 J. L. 372
 Buttmann (P.), 40

Cæcus, 154
 Caldwell (Mr.), 81
calèche, 93
 Carians and Cretans, 95
carmen, 410
carnifex, 295
castra, 267
 Chalybes, 95
 Cheke (Sir J.), 25
 Chinese language, 50,
 148, 157
 Cicero, 194, 344
 Civilization, linguistic
 records of, 11
clarus, *gloria*, 266, 287
 Classical learning, value
 of, 8

coles, 154
 Colebrooke (H. T.), 36
 Coleridge (S. T.), 5, 51,
 236
conari, 447
 Confusion of tongues, 45
consul, 269
 Contrast (association
 by), 53
cormorant, 315
cornu, 209
 Cratylus, Plato's, 60
crepusculum, 160
crus, 160
 Curtius (M. George), 40,
 370
 Cyclopean walls, 455
 Czechs, 79

Dardanus, 92
 Deccan, 81
 Deduction and induc-
 tion, 5
 Demonstrative used for
 relative, 148
dempster, 225
Desdemona, 180
Dêva-nâgarî, 105
 Differential Calculus, 55
 Digamma, 110
dodrans, 161
Dorset, 92
dum-taxat, 202
Dun-cow, 470
 Dyer (Mr. T.), p. 104

 Education, information,
 and knowledge, 2
 Egyptian letters, 103
 Egyptology, 37
eja, 237, 251
Elephant and tamarind,
 296
eleven, twelve, &c. 159

- England, 76, p. 111, note
 English language, 74
 English scholarship, 22
Escalus in Shakspeare, 213
 Ethnology, 10
 Etruscan, 89, 147, 149
 Ewald (H.), 100
farrow and *furrow*, 281
filius, 177, 270
fons, 295
 Frisians and Angles, 78
 Galiffe (Mr.), p. 149, note
gamester, 225
 Garnett (Rev. R.), 37, 79, 121, 129, 133, 148, 298, 347
gas and *ghost*, 225
 Gelo and Gela, origin of their names, 459
 Genesis (Book of), 44—46, 65, 66, 71
genteel and *gentle*, 278
 German Literature, 30
Germanus, 76, 213
Getæ, 77
 Gladstone (Mr. W. E.), p. 48
 "God" and *good*, 473
Gomer, 72
 Grammar-schools, 1, 83
 Gray (T.), 48
 Greeks and Germans, 92
 Grimm (J.), 36, 108, 118—corrected pp. 187, 213, 247, &c.
 Guest (Dr. E.), 118
guna, 106
Gypsy, 225
 Hadryades, 181
 Halhed (Dr.), 35
 Hamadryades, 181
 Hamaker (Professor), 40
Ha-milcar, &c. 479
 Hamilton (Sir W. R.), 55
 Hamites, 70
 Hebrew language, illustrations of, 100, 102, 116, 133, 137, 148, 157, 184, 186, 189, 193, 199, 208, 209, 234, 296, 479
henbane, 473
Hengist and *Horsa*, 78
Hercules, *Ἡρακλῆς*, 222
 Hermann (G.), 29, 38
Herminones, *Hermunduri*, &c. 76, 92, 213
 Heyne (Prof.), 29
hic, 139
 Historical criticism, 13
 Homeric deities, 463
 Houssaye (Arsène), 47
humanitas, 4
 Humboldt (W. von), 42
humerus, 116
 Hunter (Prof.), p. 256, note
 Hyacinthus, legend of, p. 696, note
 ι termination, 139
 Iconium, 66
 Ideas (doctrine of), 58, 59
idoneus, 116
 "if," 205
igitur, 362
ille, 166
 Imagination, p. 90, note
immo, 191
 Indo-Germanic, 71
indulgeo, 344
Ingævones, 76
iniquus, *ingens*, 185
inter, 204
interficio, *intereo*, 382
Irân, 80
iri, 447
Iscævones, 75, p. 127, note
 Jackson (Dr. Cyril), 192
 Jones (Sir W.), 35
 Kant (I.), 54
 Kemble (Mr. J. M.), 37
 Kenrick (Rev. J.), 32
 Key (Mr. T. H.), pp. 238, note, 248, note, 340, note, 436, note, 465, note, 474 sqq., 587, note.
King, and kingly titles, 337, 479
 Klaproth (H. J.), p. 360, note
 Language (its regular changes), 50
 Latin participles, 295
 Law and Observation, 5
 Layard (Mr.), 37
 Leibnitz, 34, 50
 Lepsius (Dr. R.), 13, 37, 100, 153, 162
 Lewis (Sir G. C.), pp. 48, 709
 Light and sound, 460
 Lithuanians, 77
 Lobeck (Professor), 38
lobster, 212
longus, 344
lord, *lady*, 338
loup-garou, 110, 315
lubrican, 221
 Lucretius, 54
 Luna, 461
 Luther, 15, 20, 21, 47
 Lycian language, 92
Magog, 72
malus, 185
manifestus, 450
Mannus, 76
 Mansel (Mr. H. L.), 46, 55, 125
Marcomanni, 76
Mardi, *Mardonias*, *Mardontes*, 213
 -μαρ- = -μεντ-, 114, 133, 256
 Matthew (St.) xvi. 18; 15
 Melancthon, 15
Melicarthus, 479
 Mexico, 67
 Meyer (Dr. K.), p. 161, note
miles, 163
 Müller, K. O., 29, 38
 Müller, Max, 11, 39, 444
murus, 178
 Names of objects, 44, 454
Nero, 332
 Niebuhr (B. G.), 29
Nod (land of), p. 116, note
 Nominalism, 18, 20, 56
non, 188
 Norris (Mr. E.), 37, 104
novem, 161
numerus, 116
ob, 172
obambulo, 174
obedio, 128, 222
 Occham (William), 19
octavus, 164
olim, 166
opulentus, 152
 Ovid, *Fast.* v. 21; 99

- page*, 225
palæontology, 12
Pali, 84
paries, pars, 178
Paris and Priamus, 92
Pelasgians, 95
Perception and Conception, 51
peregrinus, 178
pereo, 382, 479
Personification of the powers of nature, p. 234, note
Philistines, 95
Philology, 3
Phoenicians, 94
Plato, 57 sqq.
pons, 295
pontifex, 295
porca, porcus, 281
Porson (R.), 24, 31
posco, 209
posthac, quapropter, &c. 240
Pott (A. F.), 38, 168
Præcrit, 83, 108
prehendo, 281
Prichard (Dr. J. C.), 37
Prinsep (James), 37, 105
Printing, invention of, 22, 47
Prolepsis, 300
propitius, 284
Prose, introduction of, 48
pugna, 410
Pygmies, 81

quarrel, 225
quick, 112
quintus, not quinctus, 161
quispiam, quivis, quisquam, 199

Rabelais, 395
Ramâyana, p. 135, note
Rawlinson (Sir H. C.), 37
Realism and Nominalism, 5, 18
Reason and Understanding, 5, 51
refert=reifert, 240
rego, rex, &c. 479
Reiz (F. W.), 29
Relative Sentence, 148, 300

renideo, 459
Roads, 150, 479
Roget de Belloguet, 79
rogo, 209
Romance languages, 49
Rosen (Dr. F.), 55
Röth (Dr.), 95
Russians, 77

Sacæ, 93
Samogetæ, 77
Sanscrit, 83, 84, 108, 399, 420, 455, 479
Satrap, 160, 213
Sauromatæ, 82
Saxons, 74
Sealiger (J. J.), 15, 24
Schlegel (A. W. von), 36
Schleicher (Dr. A.), 112
Schleiermacher (Dr. F.), 29
Sclavonians, 77, 88
Scythians, 88, 93
secundus, 155
securis, 414
Shilleto (Mr. R.), 202
slave, 225
sonus, 110, 199
Sophists (old), 61
soror, 225
Space and Time, 54
Spanish h, 111
spinster, 225
squire, 213
Steinthal (Dr.), 3, 148
supplex, 318
surdus, 460
Suwarrow, 225
swart, 460
Sykes (Col.), 84
Syntax, 48

Tacitus, German., 76
tapster, 225
Telchines, 95
Telegraph, p. 667
templum, 267
teres, 178
Testament (Old), 61, 126
Teutamus, 92
Thiersch (Prof.), 101
Thirlwall (Bishop), his *History of Greece*, 32
Thompson (Prof. W. H.), 58, 59

Thuringians, 76, 92
Time, 55
Tooke (Mr. J. Horne), 61, 126
Tower-builders, 45
Trendelenburg (Dr. A.), 125
Triopian rites, 459
Troubadours, 49
Troy, 92
Tubalquin, 25
Turanian, 69

Ulphilas, 82
Understanding, 5, 51
Unity of man, 43
uxor, 225

valeo, 379
vapor, 458
vel, 199
Venus, 285
vestibulum, 180
vir, 332
Virgil, Georg. III. 192; 174
 ———— 232; 170
 ———— *Æn.* ix. 6; 188
vivo, 112, 378
Vridhhi and Guna, 105

Walls of picked stones, 455
Wansbeck-water, 11
Weber (A.), 105
Weight of vowels, 101
Welcker (F. G.), 29, 457
Wends, 82
Werdin (J.), (*i.e.* P. Paul. a S. Barthol.), 35
Whewell (Dr. W.), 12
Williams (Monier), 105
Winning (Rev. J.), 37
Wolf (F. A.), 29
Writing, origin of, 46
 ———— *effects on language*. 48

Xerxes, 479

Yaçna, 86

Zend, 86
Zeuss, 79
Zoroaster, 85

PRINTED BY F. A. BROCKHAUS, LEIPZIG.

GENERAL LIST OF WORKS

PUBLISHED BY

Messrs. LONGMANS, GREEN, READER, and DYER.

ARTS, MANUFACTURES, &c.....	12	MISCELLANEOUS WORKS and POPULAR	
ASTRONOMY, METEOROLOGY, POPULAR		METAPHYSICS	6
GEOGRAPHY, &c.	7	NATURAL HISTORY & POPULAR SCIENCE	8
BIOGRAPHICAL WORKS	3	PERIODICAL PUBLICATIONS.....	20
CHEMISTRY, MEDICINE, SURGERY, and		POETRY and THE DRAMA.....	17
the ALLIED SCIENCES	9	RELIGIOUS and MORAL WORKS	13
CRITICISM, PHILOSOPHY, POLITY, &c....	4	RURAL SPORTS, &c.....	18
FINE ARTS and ILLUSTRATED EDITIONS	11	TRAVELS, VOYAGES, &c.	15
HISTORY, POLITICS, and HISTORICAL		WORKS of FICTION	16
MEMOIRS	1	WORKS of UTILITY and GENERAL	
INDEX	21—24	INFORMATION	19
KNOWLEDGE for the YOUNG	20		

History, Politics, Historical Memoirs, &c.

The History of England from the Fall of Wolsey to the Defeat of the Spanish Armada. By JAMES ANTHONY FROUDE, M.A.

CABINET EDITION, 12 vols. cr. 8vo. £3 12s.
LIBRARY EDITION, 12 vols. 8vo. £8 18s.

The History of England from the Accession of James II. By Lord MACAULAY.

STUDENT'S EDITION, 2 vols. crown 8vo. 12s.
PEOPLE'S EDITION, 4 vols. crown 8vo. 16s.
CABINET EDITION, 8 vols. post 8vo. 48s.
LIBRARY EDITION, 5 vols. 8vo. £4.

Lord Macaulay's Works. Complete and uniform Library Edition. Edited by his Sister, Lady TREVELYAN. 8 vols. 8vo. with Portrait, price £5 5s. cloth, or £8 8s. bound in tree-calf by Rivière.

Varieties of Vice-Regal Life. By Major-General Sir WILLIAM DENISON, K.C.B. late Governor-General of the Australian Colonies, and Governor of Madras. With Two Maps. 2 vols. 8vo. 28s.

On Parliamentary Government in England: its Origin, Development, and Practical Operation. By ALPHEUS TODD, Librarian of the Legislative Assembly of Canada. 2 vols. 8vo. price £1 17s.

The Constitutional History of England since the Accession of George III. 1760—1860. By Sir THOMAS ERSKINE MAY, K.C.B. Cabinet Edition (the Third), thoroughly revised. 3 vols. crown 8vo. price 18s.

A Historical Account of the Neutrality of Great Britain during the American Civil War. By MOUNTAGUE BERNARD, M.A. Royal 8vo. price 16s.

The History of England, from the Earliest Times to the Year 1865. By C. D. YONGE, Regius Professor of Modern History in Queen's College, Belfast. New Edition. Crown 8vo. 7s. 6d.

Lectures on the History of England, from the Earliest Times to the Death of King Edward II. By WILLIAM LONGMAN. With Maps and Illustrations. 8vo. 15s.

The History of the Life and Times of Edward the Third. By WILLIAM LONGMAN. With 9 Maps, 8 Plates, and 16 Woodcuts. 2 vols. 8vo. 28s.

History of Civilization in England and France, Spain and Scotland. By HENRY THOMAS BUCKLE. New Edition of the entire work, with a complete INDEX. 3 vols. crown 8vo. 24s.

Realities of Irish Life. By W. STEUART TRENCH, Land Agent in Ireland to the Marquess of Lansdowne, the Marquess of Bath, and Lord Digby. Fifth Edition. Crown 8vo. 6s.

The Student's Manual of the History of Ireland. By M. F. CUSACK, Authoress of 'The Illustrated History of Ireland.' Crown 8vo. price 6s.

A Student's Manual of the History of India, from the Earliest Period to the Present. By Colonel MEADOWS TAYLOR, M.R.A.S. M.R.I.A. Crown 8vo. with Maps, 7s. 6d.

The History of India, from the Earliest Period to the close of Lord Dalhousie's Administration. By JOHN CLARK MARSHMAN. 3 vols. crown 8vo. 22s. 6d.

Indian Polity: a View of the System of Administration in India. By Lieut.-Col. GEORGE CHESNEY. Second Edition, revised, with Map. 8vo. 21s.

Home Politics: being a Consideration of the Causes of the Growth of Trade in relation to Labour, Pauperism, and Emigration. By DANIEL GRANT. 8vo. 7s.

Democracy in America. By ALEXIS DE TOCQUEVILLE. Translated by HENRY REEVE. 2 vols. 8vo. 21s.

Waterloo Lectures: a Study of the Campaign of 1815. By Colonel CHARLES C. CHESNEY, R.E. late Professor of Military Art and History in the Staff College. Second Edition. 8vo. with Map, 10s. 6d.

The Military Resources of Prussia and France, and Recent Changes in the Art of War. By Lieut.-Col. CHESNEY, R.E. and HENRY REEVE, D.C.L. Crown 8vo. 7s. 6d.

The Overthrow of the Germanic Confederation by Prussia in 1866. By Sir A. MALET, Bart. K.B.C. late H.B.M. Envoy and Minister at Frankfort. With 5 Maps. 8vo. 18s.

The Oxford Reformers—John Colet, Erasmus, and Thomas More; being a History of their Fellow-Work. By FREDERIC SEEBOHM. Second Edition. 8vo. 14s.

History of the Reformation in Europe in the Time of Calvin. By J. H. MERLE D'AUBIGNÉ, D.D. VOLS. I. and II. 8vo. 28s. VOL. III. 12s. VOL. IV. price 16s. and VOL. V. price 16s.

Chapters from French History; St. Louis, Joan of Arc, Henri IV. with Sketches of the Intermediate Periods. By J. H. GURNEY, M.A. New Edition. Fcp. 8vo. 6s. 6d.

The History of Greece. By C. THIRLWALL, D.D. Lord Bishop of St. David's. 8 vols. fcp. 28s.

The Tale of the Great Persian War, from the Histories of Herodotus. By GEORGE W. COX, M.A. late Scholar of Trin. Coll. Oxon. Fcp. 3s. 6d.

Greek History from Themistocles to Alexander, in a Series of Lives from Plutarch. Revised and arranged by A. H. CLOUGH. Fcp. with 44 Woodcuts, 6s.

Critical History of the Language and Literature of Ancient Greece. By WILLIAM MURE, of Caldwell. 5 vols. 8vo. £3 9s.

History of the Literature of Ancient Greece. By Professor K. O. MÜLLER. Translated by LEWIS and DONALDSON. 3 vols. 8vo. 21s.

The History of Rome. By WILHELM IHNE. English Edition, translated and revised by the Author. VOLS. I. and II. 8vo. 30s.

History of the City of Rome from its Foundation to the Sixteenth Century of the Christian Era. By THOMAS H. DYER, LL.D. 8vo. with 2 Maps, 15s.

History of the Romans under the Empire. By Very Rev. CHARLES MERIVALE, D.C.L. Dean of Ely. 8 vols. post 8vo. price 48s.

The Fall of the Roman Republic; a Short History of the Last Century of the Commonwealth. By the same Author. 12mo. 7s. 6d.

Historical and Chronological Encyclopædia; comprising Chronological Notices of all the Great Events of Universal History, including Treaties, Alliances, Wars, Battles, &c.; Incidents in the Lives of Eminent Men, Scientific and Geographical Discoveries, Mechanical Inventions, and Social, Domestic, and Economical Improvements. By the late B. B. WOODWARD, B.A. and W. L. R. CATES. 1 vol. 8vo.

[In the press.]

An Historical View of Literature and Art in Great Britain from the Accession of the House of Hanover to the Reign of Queen Victoria. By J. MURRAY GRAHAM, M.A. 8vo. price 14s.

History of European Morals from Augustus to Charlemagne. By W. E. H. LECKY, M.A. 2 vols. 8vo. price 28s.

History of the Rise and Influence of the Spirit of Rationalism in Europe. By the same Author. Cabinet Edition (the Fourth). 2 vols. crown 8vo. price 16s.

God in History; or, the Progress of Man's Faith in the Moral Order of the World. By the late Baron BUNSEN. Translated from the German by SUSANNA WINKWORTH; with a Preface by Dean STANLEY 3 vols. 8vo. 42s.

Socrates and the Socratic Schools. Translated from the German of Dr. E. ZELLER, with the Author's approval, by the Rev. OSWALD J. REICHEL, B.C.L. and M.A. Crown 8vo. 8s. 6d.

The Stoics, Epicureans, and Sceptics. Translated from the German of Dr. E. ZELLER, with the Author's approval, by OSWALD J. REICHEL, B.C.L. and M.A. Crown 8vo. 14s.

Saint-Simon and Saint-Simonism; a Chapter in the History of Socialism in France. By ARTHUR J. BOOTH, M.A. Crown 8vo. price 7s. 6d.

The History of Philosophy, from Thales to Comte. By GEORGE HENRY LEWES. Fourth Edition, corrected, and partly rewritten. 2 vols. 8vo. 32s.

The Mythology of the Aryan Nations. By GEORGE W. COX, M.A. late Scholar of Trinity College, Oxford. 2 vols. 8vo. price 28s.

The English Reformation. By F. C. MASSINGBERD, M.A. Chancellor of Lincoln. 4th Edition, revised. Fcp. 7s. 6d.

Maunder's Historical Treasury; comprising a General Introductory Outline of Universal History, and a Series of Separate Histories. Fcp. 6s.

Critical and Historical Essays contributed to the *Edinburgh Review* by the Right Hon. Lord MACAULAY:—

STUDENT'S EDITION, crown 8vo. 6s.

PEOPLE'S EDITION, 2 vols. crown 8vo. 8s.

CABINET EDITION, 4 vols. 24s.

LIBRARY EDITION, 3 vols. 8vo. 36s.

History of the Early Church, from the First Preaching of the Gospel to the Council of Nicæa, A.D. 325. By the Author of 'Amy Herbert.' New Edition. Fcp. 4s. 6d.

Sketch of the History of the Church of England to the Revolution of 1688. By the Right Rev. T. V. SHORT, D.D. Lord Bishop of St. Asaph. Eighth Edition. Crown 8vo. 7s. 6d.

History of the Christian Church, from the Ascension of Christ to the Conversion of Constantine. By E. BURTON, D.D. late Regius Prof. of Divinity in the University of Oxford. Fcp. 3s. 6d.

Biographical Works.

A Memoir of Daniel Maclise, R.A. By W. JUSTIN O'DRISCOLL, M.R.I.A. Barrister-at-Law. With Portrait and Woodcuts. Post 8vo. price 7s. 6d.

Memoirs of the Marquis of Pombal; with Extracts from his Writings and from Despatches in the State Papers Office. By the CONDE DA CARNOTA. New Edition. 8vo. price 7s.

Reminiscences of Fifty Years. By MARK BOYD. Post 8vo. price 10s. 6d.

The Life of Isambard Kingdom Brunel, Civil Engineer. By ISAMBARD BRUNEL, B.C.L. of Lincoln's Inn, Chancellor of the Diocese of Ely. With Portrait, Plates, and Woodcuts. 8vo. 21s.

The Life and Letters of the Rev. Sydney Smith. Edited by his Daughter, Lady HOLLAND, and Mrs. AUSTIN. New Edition, complete in One Volume. Crown 8vo. price 6s.

Some Memorials of R. D. Hampden, Bishop of Hereford. Edited by his Daughter, HENRIETTA HAMPDEN. 8vo. with Portrait, price 12s.

The Life and Travels of George Whitefield, M.A. By JAMES PATERSON GLEDSTONE. 8vo. price 14s.

'This pleasantly-written and genial biography of the most extraordinary preacher that England ever produced endeavours, and we think with considerable success, to furnish the answer to a question which at first appears to be almost incapable of any satisfactory solution—What was the secret of his extraordinary power.'

ATHENEUM.

Memoir of Pope Sixtus the Fifth.

By Baron HÜBNER. Translated from the Original in French, with the Author's sanction, by HUBERT E. H. JERNINGHAM. 2 vols. 8vo. [*In the press.*]

The Life and Letters of Faraday.

By Dr. BENCE JONES, Secretary of the Royal Institution. Second Edition, with Portrait and Woodcuts. 2 vols. 8vo. 28s.

Faraday as a Discoverer.

By JOHN TYNDALL, LL.D. F.R.S. New and Cheaper Edition, with Two Portraits. Fcp. 8vo. price 3s. 6d.

Lives of the Lord Chancellors

and Keepers of the Great Seal of Ireland, from the Earliest Times to the Reign of Queen Victoria. By J. R. O'FLANAGAN, M.R.I.A. Barrister. 2 vols. 8vo. 36s.

Dictionary of General Biography;

containing Concise Memoirs and Notices of the most Eminent Persons of all Countries, from the Earliest Ages to the Present Time. Edited by WILLIAM L. R. CATES. 8vo. price 21s.

Life of the Duke of Wellington.

By the Rev. G. R. GLEIG, M.A. Popular Edition, carefully revised; with copious Additions. Crown 8vo. with Portrait, 5s.

Father Mathew; a Biography.

By JOHN FRANCIS MAGUIRE, M.P. Popular Edition, with Portrait. Crown 8vo. 3s. 6d.

History of my Religious Opinions.

By J. H. NEWMAN, D.D. Being the Substance of *Apologia pro Vitâ Suâ*. Post 8vo. price 6s.

Letters and Life of Francis

Bacon, including all his Occasional Works. Collected and edited, with a Commentary, by J. SPEDDING. VOLS. I. & II. 8vo. 24s. VOLS. III. & IV. 24s. VOL. V. 12s.

Felix Mendelssohn's Letters from

Italy and Switzerland, and *Letters from 1833 to 1847*, translated by Lady WALLACE. With Portrait. 2 vols. crown 8vo. 5s. each.

Memoirs of Sir Henry Havelock,

K.C.B. By JOHN CLARK MARSHMAN. People's Edition, with Portrait. Crown 8vo. price 3s. 6d.

Essays in Ecclesiastical Biogra-

phy. By the Right Hon. Sir J. STEPHEN, LL.D. Cabinet Edition. Crown 8vo. 7s. 6d.

Vicissitudes of Families.

By Sir J. BERNARD BURKE, C.B. Ulster King of Arms. New Edition, remodelled and enlarged. 2 vols. crown 8vo. 21s.

Lives of the Queens of England.

By AGNES STRICKLAND. Library Edition, newly revised; with Portraits of every Queen, Autographs, and Vignettes. 8 vols. post 8vo. 7s. 6d. each.

Maunder's Biographical Treas-

ury. Thirteenth Edition, reconstructed and partly re-written, with above 1,000 additional Memoirs, by W. L. R. CATES. Fcp. 6s.

*Criticism, Philosophy, Polity, &c.***On Representative Government.**

By JOHN STUART MILL. Third Edition. 8vo. 9s. crown 8vo. 2s.

On Liberty.

By the same Author. Fourth Edition. Post 8vo. 7s. 6d. Crown 8vo. 1s. 4d.

Principles of Political Economy.

By the same. Eighth Edition. 2 vols. 8vo. 30s. or in 1 vol. crown 8vo. 5s.

Utilitarianism.

By the same. 4th Edit. 8vo. 5s.

Dissertations and Discussions.

By the same Author. Second Edition. 3 vols. 8vo. price 36s.

Examination of Sir W. Hamilton's

Philosophy, and of the principal Philosophical Questions discussed in his Writings.

By the same. Third Edition. 8vo. 16s.

The Subjection of Women.

By JOHN STUART MILL. New Edition. Post 8vo 5s.

Inaugural Address delivered to the

University of St. Andrews. By JOHN STUART MILL. 8vo. 5s. Crown 8vo. 1s.

Analysis of the Phenomena of

the Human Mind. By JAMES MILL. A New Edition, with Notes, Illustrative and Critical, by ALEXANDER BAIN, ANDREW FINDLATER, and GEORGE GROTE. Edited, with additional Notes, by JOHN STUART MILL. 2 vols. 8vo. price 28s.

The Elements of Political Econ-

omy. By HENRY DUNNING MACLEOD, M.A. Barrister-at-Law. 8vo. 16s.

A Dictionary of Political Economy;

Biographical, Bibliographical, Historical, and Practical. By the same Author. VOL. I. royal 8vo. 30s.

Lord Bacon's Works, collected and edited by R. L. ELLIS, M.A. J. SPEDDING, M.A. and D. D. HEATH. New and Cheaper Edition. 7 vols. 8vo. price £3 13s. 6d.

A System of Logic, Ratiocinative and Inductive. By JOHN STUART MILL. Seventh Edition. 2 vols. 8vo. 25s.

Analysis of Mr. Mill's System of Logic. By W. STEBBING, M.A. New Edition. 12mo. 3s. 6d.

The Institutes of Justinian; with English Introduction, Translation, and Notes. By T. C. SANDARS, M.A. Barrister-at-Law. New Edition. 8vo. 15s.

The Ethics of Aristotle; with Essays and Notes. By Sir A. GRANT, Bart. M.A. LL.D. Second Edition, revised and completed. 2 vols. 8vo. price 28s.

The Nicomachean Ethics of Aristotle. Newly translated into English. By R. WILLIAMS, B.A. Fellow and late Lecturer Merton College, Oxford. 8vo. 12s.

Bacon's Essays, with Annotations. By R. WHATELY, D.D. late Archbishop of Dublin. Sixth Edition. 8vo. 10s. 6d.

Elements of Logic. By R. WHATELY, D.D. late Archbishop of Dublin. New Edition. 8vo. 10s. 6d. crown 8vo. 4s. 6d.

Elements of Rhetoric. By the same Author. New Edition. 8vo. 10s. 6d. Crown 8vo. 4s. 6d.

English Synonymes. By E. JANE WHATELY. Edited by Archbishop WHATELY. 5th Edition. Fcp. 3s.

An Outline of the Necessary Laws of Thought: a Treatise on Pure and Applied Logic. By the Most Rev. W. THOMSON, D.D. Archbishop of York. Ninth Thousand. Crown 8vo. 5s. 6d.

The Election of Representatives, Parliamentary and Municipal; a Treatise. By THOMAS HARE, Barrister-at-Law. Third Edition, with Additions. Crown 8vo. 6s.

Speeches of the Right Hon. Lord MACAULAY, corrected by Himself. People's Edition, crown 8vo. 3s. 6d.

Lord Macaulay's Speeches on Parliamentary Reform in 1831 and 1832. 16mo. price ONE SHILLING.

Walker's Pronouncing Dictionary of the English Language. Thoroughly revised Editions, by B. H. SMART. 8vo. 12s. 16mo. 6s.

A Dictionary of the English Language. By R. G. LATHAM, M.A. M.D. F.R.S. Founded on the Dictionary of Dr. S. JOHNSON, as edited by the Rev. H. J. TODD, with numerous Emendations and Additions. 4 vols. 4to. price £7.

Thesaurus of English Words and Phrases, classified and arranged so as to facilitate the expression of Ideas, and assist in Literary Composition. By P. M. ROGET, M.D. New Edition. Crown 8vo. 10s. 6d.

The Debater; a Series of Complete Debates, Outlines of Debates, and Questions for Discussion. By F. ROWTON. Fcp. 6s.

Lectures on the Science of Language. By F. MAX MÜLLER, M.A. &c. Foreign Member of the French Institute. Sixth Edition. 2 vols. crown 8vo. price 16s.

Chapters on Language. By F. W. FARRAR, M.A. F.R.S. Head Master of Marlborough College. Crown 8vo. 8s. 6d.

Southey's Doctor, complete in One Volume, edited by the Rev. J. W. WARTER, B.D. Square crown 8vo. 12s. 6d.

Historical and Critical Commentary on the Old Testament; with a New Translation. By M. M. KALISCH, Ph.D. Vol. I. *Genesis*, 8vo. 18s. or adapted for the General Reader, 12s. Vol. II. *Exodus*, 15s. or adapted for the General Reader, 12s. Vol. III. *Leviticus*, Part I. 15s. or adapted for the General Reader, 8s.

A Hebrew Grammar, with Exercises. By the same. Part I. *Outlines with Exercises*, 8vo. 12s. 6d. KEY, 5s. Part II. *Exceptional Forms and Constructions*, 12s. 6d.

Manual of English Literature, Historical and Critical: with a Chapter on English Metres. By THOMAS ARNOLD, M.A. Second Edition. Crown 8vo. 7s. 6d.

A Latin-English Dictionary. By JOHN T. WHITE, D.D. Oxon. and J. E. RIDDLE, M.A. Oxon. Third Edition, revised. 2 vols. 4to. pp. 2,128, price 42s.

White's College Latin-English Dictionary (Intermediate Size), abridged from the Parent Work for the use of University Students. Medium 8vo. pp. 1,048, price 18s.

White's Junior Student's Complete Latin-English and English-Latin Dictionary. Revised Edition. Square 12mo. pp. 1,058, price 12s.

Separately { ENGLISH-LATIN, 5s. 6d.
LATIN-ENGLISH, 7s. 6d.

An English-Greek Lexicon, containing all the Greek Words used by Writers of good authority. By C. D. YONGE, B.A. New Edition. 4to. 21s.

Mr. Yonge's New Lexicon, English and Greek, abridged from his larger work (as above). Square 12mo. 8s. 6d.

The Mastery of Languages; or, the Art of Speaking Foreign Tongues Idiomatically. By THOMAS PRENDERGAST, late of the Civil Service at Madras. Second Edition. 8vo. 6s.

A Greek-English Lexicon. Compiled by H. G. LIDDELL, D.D. Dean of Christ Church, and R. SCOTT, D.D. Dean of Rochester. Sixth Edition. Crown 4to. price 36s.

A Lexicon, Greek and English, abridged for Schools from LIDDELL and SCOTT's *Greek-English Lexicon*. Twelfth Edition. Square 12mo. 7s. 6d.

A Practical Dictionary of the French and English Languages. By Professor LÉON CONTANSEAU, many years French Examiner for Military and Civil Appointments, &c. New Edition, carefully revised. Post 8vo. 10s. 6d.

Contanseau's Pocket Dictionary, French and English, abridged from the Practical Dictionary, by the Author. New Edition. 18mo. price 3s. 6d.

A Sanskrit-English Dictionary. The Sanskrit words printed both in the original Devanagari and in Roman letters; with References to the Best Editions of Sanskrit Authors, and with Etymologies and comparisons of Cognate Words chiefly in Greek, Latin, Gothic, and Anglo-Saxon. Compiled by T. BENFEY. 8vo. 52s. 6d.

New Practical Dictionary of the German Language; German-English, and English-German. By the Rev. W. L. BLACKLEY, M.A. and Dr. CARL MARTIN FRIEDLÄNDER. Post 8vo. 7s. 6d.

Miscellaneous Works and Popular Metaphysics.

The Essays and Contributions of A. K. H. B. Uniform Editions:—

Recreations of a Country Parson. FIRST and SECOND SERIES, 3s. 6d. each.

The Commonplace Philosopher in Town and Country. Crown 8vo. 3s. 6d.

Leisure Hours in Town; Essays Consolatory, Æsthetical, Moral, Social, and Domestic. Crown 8vo. 3s. 6d.

The Autumn Holidays of a Country Parson. Crown 8vo. 3s. 6d.

The Graver Thoughts of a Country Parson. FIRST and SECOND SERIES, crown 8vo. 3s. 6d. each.

Critical Essays of a Country Parson, selected from Essays contributed to *Fraser's Magazine*. Crown 8vo. 3s. 6d.

Sunday Afternoons at the Parish Church of a Scottish University City. Crown 8vo. 3s. 6d.

Lessons of Middle Age, with some Account of various Cities and Men. Crown 8vo. 3s. 6d.

Counsel and Comfort Spoken from a City Pulpit. Crown 8vo. 3s. 6d.

Changed Aspects of Unchanged Truths; Memorials of St. Andrews Sundays. Crown 8vo. 3s. 6d.

Present-Day Thoughts; Memorials of St. Andrews Sundays. Crown 8vo. 3s. 6d.

Short Studies on Great Subjects.

By JAMES ANTHONY FROUDE, M.A. late Fellow of Exeter College, Oxford. Third Edition. 8vo. 12s. SECOND SERIES, 8vo. 12s.

Lord Macaulay's Miscellaneous Writings:—

LIBRARY EDITION, 2 vols. 8vo. Portrait, 21s.
PEOPLE'S EDITION, 1 vol. crown 8vo. 4s. 6d.

Lord Macaulay's Miscellaneous Writings and Speeches. Student's Edition, in One Volume, crown 8vo. price 6s.

The Rev. Sydney Smith's Miscellaneous Works, including Peter Plymley's Letters, Articles contributed to the *Edinburgh Review*, Letters to Archdeacon Singleton, and other Miscellaneous Writings. 1 vol. crown 8vo. 6s.

The Wit and Wisdom of the Rev. SYDNEY SMITH; a Selection of the most memorable Passages in his Writings and Conversation. Crown 8vo. 3s. 6d.

The Eclipse of Faith; or, a Visit to a Religious Sceptic. By HENRY ROGERS. Twelfth Edition. Fcp. 8vo. 5s.

Defence of the Eclipse of Faith, by its Author. Third Edition. Fcp. 8vo. 3s. 6d.

Selections from the Correspondence of R. E. H. Greyson. By the same Author. Third Edition. Crown 8vo. 7s. 6d.

Families of Speech, Four Lectures delivered at the Royal Institution of Great Britain. By the Rev. F. W. FARRAR, M.A. F.R.S. Post 8vo. with 2 Maps, 5s. 6d.

Chips from a German Workshop; being Essays on the Science of Religion, and on Mythology, Traditions, and Customs. By F. MAX MÜLLER, M.A. &c. Foreign Member of the French Institute. 3 vols. 8vo. £2.

An Introduction to Mental Philosophy, on the Inductive Method. By J. D. MORELL, M.A. LL.D. 8vo. 12s.

Elements of Psychology, containing the Analysis of the Intellectual Powers. By the same Author. Post 8vo. 7s. 6d.

The Secret of Hegel: being the Hegelian System in Origin, Principle, Form, and Matter. By JAMES HUTCHISON STIRLING. 2 vols. 8vo. 28s.

Sir William Hamilton; being the Philosophy of Perception: an Analysis. By the same Author. 8vo. 5s.

The Senses and the Intellect. By ALEXANDER BAIN, LL.D. Prof. of Logic in the Univ. of Aberdeen. Third Edition. 8vo. 15s.

Mental and Moral Science: a Compendium of Psychology and Ethics. By ALEXANDER BAIN, LL.D. Second Edition. Crown 8vo. 10s. 6d.

Astronomy, Meteorology, Popular Geography, &c.

Outlines of Astronomy. By Sir J. F. W. HERSCHEL, Bart. M.A. Eleventh Edition, with Plates and Woodcuts. Square crown 8vo. 12s.

Other Worlds than Ours; the Plurality of Worlds Studied under the Light of Recent Scientific Researches. By R. A. PROCTOR, B.A. F.R.A.S. Second Edition, revised and enlarged; with 14 Illustrations. Crown 8vo. 10s. 6d.

The Sun; Ruler, Light, Fire, and Life of the Planetary System. By RICHARD A. PROCTOR, B.A. F.R.A.S. With 10 Plates (7 coloured) and 107 Woodcuts. Crown 8vo. price 14s.

Saturn and its System. By the same Author. 8vo. with 14 Plates, 14s.

Ueberweg's System of Logic, and History of Logical Doctrines. Translated, with Notes and Appendices, by T. M. LINDSAY, M.A. F.R.S.E. 8vo. price 16s.

The Philosophy of Necessity; or, Natural Law as applicable to Mental, Moral, and Social Science. By CHARLES BRAY. Second Edition. 8vo. 9s.

The Education of the Feelings and Affections. By the same Author. Third Edition. 8vo. 3s. 6d.

On Force, its Mental and Moral Correlates. By the same Author. 8vo. 5s.

Time and Space; a Metaphysical Essay. By SHADWORTH H. HODGSON. 8vo. price 16s.

The Theory of Practice; an Ethical Inquiry. By SHADWORTH H. HODGSON. 2 vols. 8vo. price 24s.

A Treatise on Human Nature; being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects. By DAVID HUME. Edited, with Notes, &c. by T. H. GREEN, Fellow, and T. H. GROSE, late Scholar, of Balliol College, Oxford. [In the press.]

Essays Moral, Political, and Literary. By DAVID HUME. By the same Editors. [In the press.]

** The above will form a new edition of DAVID HUME's *Philosophical Works*, complete in Four Volumes, but to be had in Two separate Sections as announced.

Celestial Objects for Common Telescopes. By T. W. WEBB, M.A. F.R.A.S. Second Edition, revised and enlarged, with Map of the Moon and Woodcuts. 16mo. price 7s. 6d.

Navigation and Nautical Astronomy (Practical, Theoretical, Scientific) for the use of Students and Practical Men. By J. MERRIFIELD, F.R.A.S. and H. EVERS. 8vo. 14s.

The Canadian Dominion. By CHARLES MARSHALL. With 6 Illustrations on Wood. 8vo. price 12s. 6d.

A General Dictionary of Geography, Descriptive, Physical, Statistial, and Historical; forming a complete Gazetteer of the World. By A. KEITH JOHNSTON, F.R.S.E. New Edition. 8vo. price 31s. 6d.

A Manual of Geography, Physical, Industrial, and Political. By W. HUGHES, F.R.G.S. Prof. of Geog. in King's Coll. and in Queen's Coll. Lond. With 6 Maps. Fcp. 7s. 6d.

Maunder's Treasury of Geography, Physical, Historical, Descriptive, and Political. Edited by W. HUGHES, F.R.G.S. With 7 Maps and 16 Plates. Fcp. 6s.

The Public Schools Atlas of Modern Geography. In Thirty-one Maps, exhibiting clearly the more important Physical Features of the Countries delineated, and Noting all the Chief Places of Historical, Commercial, and Social Interest. Edited, with an Introduction, by the Rev. G. BUTLER, M.A. Imperial quarto, price 3s. 6d. sewed; 5s. cloth. [*Nearly ready.*]

Natural History and Popular Science.

Ganot's Elementary Treatise on Physics, Experimental and Applied, for the use of Colleges and Schools. Translated and Edited with the Author's sanction by E. ATKINSON, Ph.D. F.C.S. New Edition, revised and enlarged; with a Coloured Plate and 620 Woodcuts. Post 8vo. 15s.

The Elements of Physics or Natural Philosophy. By NEIL ARNOTT, M.D. F.R.S. Physician-Extraordinary to the Queen. Sixth Edition, re-written and completed. 2 Parts, 8vo. 21s.

Dove's Law of Storms, considered in connexion with the ordinary Movements of the Atmosphere. Translated by R. H. SCOTT, M.A. T.C.D. 8vo. 10s. 6d.

Sound: a Course of Eight Lectures delivered at the Royal Institution of Great Britain. By Professor JOHN TYNDALL, LL.D. F.R.S. New Edition, with Portrait and Woodcuts. Crown 8vo. 9s.

Heat a Mode of Motion. By Professor JOHN TYNDALL, LL.D. F.R.S. Fourth Edition. Crown 8vo. with Woodcuts, price 10s. 6d.

Researches on Diamagnetism and Magne-Crystallic Action; including the Question of Diamagnetic Polarity. By Professor TYNDALL. With 6 Plates and many Woodcuts. 8vo. 14s.

Notes of a Course of Nine Lectures on Light, delivered at the Royal Institution, A.D. 1869. By Professor TYNDALL. Crown 8vo. 1s. sewed, or 1s. 6d. cloth.

Notes of a Course of Seven Lectures on Electrical Phenomena and Theories, delivered at the Royal Institution, A.D. 1870. By Professor TYNDALL. Crown 8vo. 1s. sewed, or 1s. 6d. cloth.

A Treatise on Electricity, in Theory and Practice. By A. DE LA RIVE, Prof. in the Academy of Geneva. Translated by C. V. WALKER, F.R.S. 3 vols. 8vo. with Woodcuts, £3 13s.

Fragments of Science for Unscientific People; a Series of detached Essays, Lectures, and Reviews. By JOHN TYNDALL, LL.D. F.R.S. Second Edition. 8vo. price 14s.

Light Science for Leisure Hours; a Series of Familiar Essays on Scientific Subjects, Natural Phenomena, &c. By R. A. PROCTOR, B.A. F.R.A.S. Crown 8vo. price 7s. 6d.

Light: its Influence on Life and Health. By FORBES WINLOW, M.D. D.C.L. Oxon. (Hon.) Fcp. 8vo. 6s.

The Correlation of Physical Forces. By W. R. GROVE, Q.C. V.P.R.S. Fifth Edition, revised, and Augmented by a Discourse on Continuity. 8vo. 10s. 6d. The *Discourse*, separately, price 2s. 6d.

The Beginning: its When and its How. By MUNGO PONTON, F.R.S.E. Post 8vo. with very numerous Illustrations, 18s.

Manual of Geology. By S. HAUGHTON, M.D. F.R.S. Fellow of Trin. Coll. and Prof. of Geol. in the Univ. of Dublin. Second Edition, with 66 Woodcuts. Fcp. 7s. 6d.

Van Der Hoeven's Handbook of Zoology. Translated from the Second Dutch Edition by the Rev. W. CLARK, M.D. F.R.S. 2 vols. 8vo. with 24 Plates of Figures, 60s.

Professor Owen's Lectures on the Comparative Anatomy and Physiology of the Invertebrate Animals. Second Edition, with 235 Woodcuts. 8vo. 21s.

The Comparative Anatomy and Physiology of the Vertebrate Animals. By RICHARD OWEN, F.R.S. D.C.L. With 1,472 Woodcuts. 3 vols. 8vo. £3 13s. 6d.

Insects at Home. By the Rev. J. G. WOOD, M.A., F.L.S. With a Frontispiece in Colours, 21 full-page Illustrations and about 700 smaller Illustrations from original designs engraved on Wood by G. PEARSON. 8vo. price 21s.

Homes without Hands: a Description of the Habitations of Animals, classed according to their Principle of Construction. By Rev. J. G. WOOD, M.A. F.L.S. With about 140 Vignettes on Wood. 8vo. 21s.

Strange Dwellings; being a Description of the Habitations of Animals, abridged from 'Homes without Hands.' By J. G. WOOD, M.A. F.L.S. With a New Frontispiece and about 60 other Woodcut Illustrations. Crown 8vo. price 7s. 6d.

The Harmonies of Nature and Unity of Creation. By Dr. G. HARTWIG. 8vo. with numerous Illustrations, 18s.

The Sea and its Living Wonders. By the same Author. Third Edition, enlarged. 8vo. with many Illustrations, 21s.

The Tropical World. By the same Author. With 8 Chromoxylographs and 172 Woodcuts. 8vo. 21s.

The Subterranean World. By the same Author. With 3 Maps and about 80 Woodcut Illustrations, including 8 full size of page. 8vo. price 21s.

The Polar World: a Popular Description of Man and Nature in the Arctic and Antarctic Regions of the Globe. By the same Author. With 8 Chromoxylographs, 3 Maps, and 85 Woodcuts. 8vo. 21s.

The Origin of Civilisation and the Primitive Condition of Man; Mental and Social Condition of Savages. By Sir JOHN LUBBOCK, Bart. M.P. F.R.S. Second Edition, revised, with 25 Woodcuts. 8vo. price 16s.

The Primitive Inhabitants of Scandinavia. Containing a Description of the Implements, Dwellings, Tombs, and Mode of Living of the Savages in the North of Europe during the Stone Age. By SVEN NILSSON. 8vo. Plates and Woodcuts, 18s.

Bible Animals; being a Description of Every Living Creature mentioned in the Scriptures, from the Ape to the Coral. By the Rev. J. G. WOOD, M.A. F.L.S. With about 100 Vignettes on Wood. 8vo. 21s.

A Familiar History of Birds. By E. STANLEY, D.D. late Lord Bishop of Norwich. Fcp. with Woodcuts, 8s. 6d.

Kirby and Spence's Introduction to Entomology, or Elements of the Natural History of Insects. Crown 8vo. 5s.

Maunder's Treasury of Natural History, or Popular Dictionary of Zoology. Revised and corrected by T. S. COBBOLD, M.D. Fcp. with 900 Woodcuts, 6s.

The Elements of Botany for Families and Schools. Tenth Edition, revised by THOMAS MOORE, F.L.S. Fcp. with 154 Woodcuts, 2s. 6d.

The Treasury of Botany, or Popular Dictionary of the Vegetable Kingdom; with which is incorporated a Glossary of Botanical Terms. Edited by J. LINDLEY, F.R.S. and T. MOORE, F.L.S. Pp. 1,274, with 274 Woodcuts and 20 Steel Plates. Two PARTS, fcp. 8vo. 12s.

The Rose Amateur's Guide. By THOMAS RIVERS. New Edition. Fcp. 4s.

Loudon's Encyclopædia of Plants; comprising the Specific Character, Description, Culture, History, &c. of all the Plants found in Great Britain. With upwards of 12,000 Woodcuts. 8vo. 42s.

Maunder's Scientific and Literary Treasury; a Popular Encyclopædia of Science, Literature, and Art. New Edition, in part rewritten, with above 1,000 new articles, by J. Y. JOHNSON. Fcp. 6s.

A Dictionary of Science, Literature, and Art. Fourth Edition, re-edited by the late W. T. BRANDE (the Author) and GEORGE W. COX, M.A. 3 vols. medium 8vo. price 63s. cloth.

Chemistry, Medicine, Surgery, and the Allied Sciences.

A Dictionary of Chemistry and the Allied Branches of other Sciences. By HENRY WATTS, F.C.S. assisted by eminent Scientific and Practical Chemists. 5 vols. medium 8vo. price £7 3s.

Elements of Chemistry, Theoretical and Practical. By WILLIAM A. MILLER, M.D. LL.D. Professor of Chemistry, King's College, London. Fourth Edition. 3 vols. 8vo. £3.

PART I. CHEMICAL PHYSICS, 15s.

PART II. INORGANIC CHEMISTRY, 21s.

PART III. ORGANIC CHEMISTRY, 24s.

A Manual of Chemistry, Descriptive and Theoretical. By WILLIAM ODLING, M.B. F.R.S. PART I. 8vo. 9s. PART II. nearly ready.

A Course of Practical Chemistry, for the use of Medical Students. By W. ODLING, M.B. F.R.S. New Edition, with 70 new Woodcuts. Crown 8vo. 7s. 6d.

Select Methods in Chemical Analysis, chiefly Inorganic. By WILLIAM CROOKES, F.R.S. With 22 Woodcuts. Crown 8vo. price 12s. 6d.

Outlines of Chemistry; or, Brief Notes of Chemical Facts. By the same Author. Crown 8vo. 7s. 6d.

Lectures on Animal Chemistry Delivered at the Royal College of Physicians in 1865. By the same Author. Crown 8vo. 4s. 6d.

Lectures on the Chemical Changes of Carbon, delivered at the Royal Institution of Great Britain. By the same Author. Crown 8vo. 4s. 6d.

Chemical Notes for the Lecture Room. By THOMAS WOOD, F.C.S. 2 vols. crown 8vo. I. on Heat, &c. price 3s. 6d. II. on the Metals, price 5s.

A Treatise on Medical Electricity, Theoretical and Practical; and its Use in the Treatment of Paralysis, Neuralgia, and other Diseases. By JULIUS ALTHAUS, M.D. &c. Second Edition, with Plate and 62 Woodcuts. Post 8vo. price 15s.

The Diagnosis, Pathology, and Treatment of Diseases of Women; including the Diagnosis of Pregnancy. By GRAILY HEWITT, M.D. &c. President of the Obstetrical Society of London. Second Edition, enlarged; with 116 Woodcuts. 8vo. 24s.

Lectures on the Diseases of Infancy and Childhood. By CHARLES WEST, M.D. &c. Fifth Edition. 8vo. 16s.

On Some Disorders of the Nervous System in Childhood. Being the Lumleian Lectures delivered before the Royal College of Physicians in March 1871. By CHARLES WEST, M.D. Crown 8vo. 5s.

On the Surgical Treatment of Children's Diseases. By T. HOLMES, M.A. &c. late Surgeon to the Hospital for Sick Children. Second Edition, with 9 Plates and 112 Woodcuts. 8vo. 21s.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. HOLMES, M.A. &c. Surgeon and Lecturer on Surgery at St. George's Hospital, and Surgeon-in-Chief to the Metropolitan Police. Second Edition, thoroughly revised, with numerous Illustrations. 5 vols. 8vo. £5 5s.

Lectures on the Principles and Practice of Physic. By Sir THOMAS WATSON, Bart. M.D. Physician-in-Ordinary to the Queen. Fifth Edition, thoroughly revised. 2 vols. 8vo. price 36s.

Lectures on Surgical Pathology. By Sir JAMES PAGET, Bart. F.R.S. Third Edition, revised and re-edited by the Author and Professor W. TURNER, M.B. 8vo. with 131 Woodcuts, 21s.

Cooper's Dictionary of Practical Surgery and Encyclopædia of Surgical Science. New Edition, brought down to the present time. By S. A. LANE, Surgeon to St. Mary's Hospital, &c. assisted by various Eminent Surgeons. VOL. II. 8vo. completing the work. [*In the press.*]

On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Diseases of the Heart. By E. HEADLAM GREENHOW, M.D. F.R.C.P. &c. 8vo. 7s. 6d.

The Climate of the South of France as Suited to Invalids; with Notices of Mediterranean and other Winter Stations. By C. T. WILLIAMS, M.A. M.D. Oxon. Physician to the Hospital for Consumption at Brompton. Second Edition. Crown 8vo. 6s.

Pulmonary Consumption; its Nature, Varieties, and Treatment: with an Analysis of One Thousand Cases to exemplify its Duration. By C. J. B. WILLIAMS, M.D. F.R.S. and C. T. WILLIAMS, M.A. M.D. Oxon. Physicians to the Hospital for Consumption at Brompton. Post 8vo. price 10s. 6d.

Clinical Lectures on Diseases of the Liver, Jaundice, and Abdominal Dropsy. By C. MURCHISON, M.D. Physician and Lecturer on the Practice of Medicine, Middlesex Hospital. Post 8vo. with 25 Woodcuts, 10s. 6d.

Anatomy, Descriptive and Surgical. By HENRY GRAY, F.R.S. With about 410 Woodcuts from Dissections. Fifth Edition, by T. HOLMES, M.A. Cantab. With a New Introduction by the Editor. Royal 8vo. 28s.

Clinical Notes on Diseases of the Larynx, investigated and treated with the assistance of the Laryngoscope. By W. MARCET, M.D. F.R.S. Crown 8vo. with 5 Lithographs, 6s.

The House I Live in; or, Popular Illustrations of the Structure and Functions of the Human Body. Edited by T. G. GIRTIN. New Edition, with 25 Woodcuts. 16mo. price 2s. 6d.

Physiological Anatomy and Physiology of Man. By the late R. B. TOWN, M.D. F.R.S. and W. BOWMAN, F.R.S. of King's College. With numerous Illustrations. VOL. II. 8vo. 25s.

VOL. I. New Edition by Dr. LIONEL S. BEALE, F.R.S. in course of publication, with numerous Illustrations. PARTS I. and II. price 7s. 6d. each.

Outlines of Physiology, Human and Comparative. By JOHN MARSHALL, F.R.C.S. Professor of Surgery in University College, London, and Surgeon to the University College Hospital. 2 vols. crown 8vo. with 122 Woodcuts, 32s.

Copland's Dictionary of Practical Medicine, abridged from the larger work, and throughout brought down to the present state of Medical Science. 8vo. 36s.

A Manual of Materia Medica and Therapeutics, abridged from Dr. PEREIRA's *Elements* by F. J. FARRE, M.D. assisted by R. BENTLEY, M.R.C.S. and by R. WARINGTON, F.R.S. 1 vol. 8vo. with 90 Woodcuts, 21s.

Thomson's Conspectus of the British Pharmacopœia. Twenty-fifth Edition, corrected by E. LLOYD BIRKETT, M.D. 18mo. 6s.

The Fine Arts, and Illustrated Editions.

In Fairyland ; Pictures from the Elf-World. By RICHARD DOYLE. With a Poem by W. ALLINGHAM. With Sixteen Plates, containing Thirty-six Designs printed in Colours. Folio, 31s. 6d.

Life of John Gibson, R.A. Sculptor. Edited by Lady EASTLAKE. 8vo. 10s. 6d.

Materials for a History of Oil Painting. By Sir CHARLES LOCKE EASTLAKE, sometime President of the Royal Academy. 2 vols. 8vo. 30s.

Albert Durer, his Life and Works ; including Autobiographical Papers and Complete Catalogues. By WILLIAM B. SCOTT. With Six Etchings by the Author and other Illustrations. 8vo. 16s.

Half-Hour Lectures on the History and Practice of the Fine and Ornamental Arts. By W. B. SCOTT. Second Edition. Crown 8vo. with 50 Woodcut Illustrations, 8s. 6d.

Italian Sculptors : being a History of Sculpture in Northern, Southern, and Eastern Italy. By C. C. PERKINS. With 30 Etchings and 13 Wood Engravings. Imperial 8vo. 42s.

Tuscan Sculptors, their Lives, Works, and Times. By the same Author. With 45 Etchings and 28 Wood Engravings. 2 vols. imperial 8vo. 63s.

The Chorale Book for England : the Hymns Translated by Miss C. WINKWORTH ; the Tunes arranged by Prof. W. S. BENNETT and OTTO GOLDSCHMIDT. Fcp. 4to. 12s. 6d.

Six Lectures on Harmony. Delivered at the Royal Institution of Great Britain. By G. A. MACFARREN. 8vo. 10s. 6d.

The New Testament, illustrated with Wood Engravings after the Early Masters chiefly of the Italian School. Crown 4to. 63s. cloth, gilt top ; or £5 5s. morocco.

The Life of Man Symbolised by the Months of the Year in their Seasons and Phases. Text selected by RICHARD PIGOT. 25 Illustrations on Wood from Original Designs by JOHN LEIGHTON, F.S.A. Quarto, 42s.

Cats' and Farlie's Moral Emblems ; with Aphorisms, Adages, and Proverbs of all Nations : comprising 121 Illustrations on Wood by J. LEIGHTON, F.S.A. with an appropriate Text by R. PIGOT. Imperial 8vo. 31s. 6d.

Sacred and Legendary Art. By Mrs. JAMESON. 6 vols. square crown 8vo. price £5 15s. 6d. as follows :—

Legends of the Saints and Martyrs. Fifth Edition, with 19 Etchings and 187 Woodcuts. 2 vols. price 31s. 6d.

Legends of the Monastic Orders. Third Edition, with 11 Etchings and 88 Woodcuts. 1 vol. price 21s.

Legends of the Madonna. Third Edition, with 27 Etchings and 165 Woodcuts. 1 vol. price 21s.

The History of Our Lord, with that of His Types and Precursors. Completed by Lady EASTLAKE. Revised Edition, with 13 Etchings and 281 Woodcuts. 2 vols. price 42s.

Lyra Germanica, the Christian Year. Translated by CATHERINE WINKWORTH ; with 125 Illustrations on Wood drawn by J. LEIGHTON, F.S.A. Quarto, 21s.

Lyra Germanica, the Christian Life. Translated by CATHERINE WINKWORTH ; with about 200 Woodcut Illustrations by J. LEIGHTON, F.S.A. and other Artists. Quarto, 21s.

The Useful Arts, Manufactures, &c.

Gwilt's Encyclopædia of Architecture, with above 1,600 Woodcuts. Fifth Edition, with Alterations and considerable Additions, by WYATT PAPWORTH. 8vo. price 52s. 6d.

A Manual of Architecture: being a Concise History and Explanation of the principal Styles of European Architecture, Ancient, Mediæval, and Renaissance; with their Chief Variations and a Glossary of Technical Terms. By THOMAS MITCHELL. With 150 Woodcuts. Crown 8vo. 10s. 6d.

History of the Gothic Revival; an Attempt to shew how far the taste for Mediæval Architecture was retained in England during the last two centuries, and has been re-developed in the present. By CHARLES L. EASTLAKE, Architect. With many Illustrations. Imperial 8vo. price 31s. 6d.

Hints on Household Taste in Furniture, Upholstery, and other Details. By CHARLES L. EASTLAKE, Architect. Second Edition, with about 90 Illustrations. Square crown 8vo. 18s.

The Engineer's Handbook; explaining the principles which should guide the young Engineer in the Construction of Machinery. By C. S. LOWNDES. Post 8vo. 5s.

Lathes and Turning, Simple, Mechanical, and Ornamental. By W. HENRY NORTHCOTT. With about 240 Illustrations on Steel and Wood. 8vo. 18s.

Principles of Mechanism, designed for the use of Students in the Universities, and for Engineering Students generally. By R. WILLIS, M.A. F.R.S. &c. Jacksonian Professor in the Univ. of Cambridge. Second Edition; with 374 Woodcuts. 8vo. 18s.

Handbook of Practical Telegraphy. By R. S. CULLEY, Memb. Inst. C.E. Engineer-in-Chief of Telegraphs to the Post-Office. Fifth Edition, revised and enlarged; with 118 Woodcuts and 9 Plates. 8vo. price 14s.

Ure's Dictionary of Arts, Manufactures, and Mines. Sixth Edition, rewritten and greatly enlarged by ROBERT HUNT, F.R.S. assisted by numerous Contributors. With 2,000 Woodcuts. 3 vols. medium 8vo. £4 14s. 6d.

Treatise on Mills and Millwork. By Sir W. FAIRBAIRN, Bart. F.R.S. New Edition, with 18 Plates and 322 Woodcuts. 2 vols. 8vo. 32s.

Useful Information for Engineers. By the same Author. FIRST, SECOND, and THIRD SERIES, with many Plates and Woodcuts. 3 vols. crown 8vo. 10s. 6d. each.

The Application of Cast and Wrought Iron to Building Purposes. By the same Author. Fourth Edition, with 6 Plates and 118 Woodcuts. 8vo. 16s.

Iron Ship Building, its History and Progress, as comprised in a Series of Experimental Researches. By Sir W. FAIRBAIRN, Bart. F.R.S. With 4 Plates and 130 Woodcuts, 8vo. 18s.

Encyclopædia of Civil Engineering, Historical, Theoretical, and Practical. By E. CRESY, C.E. With above 3,000 Woodcuts. 8vo. 42s.

A Treatise on the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By J. BOURNE, C.E. New Edition; with Portrait, 37 Plates, and 546 Woodcuts. 4to. 42s.

Catechism of the Steam Engine, in its various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture. By JOHN BOURNE, C.E. New Edition, with 89 Woodcuts. Fcp. 6s.

Recent Improvements in the Steam-Engine. By JOHN BOURNE, C.E. New Edition, including many New Examples, with 124 Woodcuts. Fcp. 8vo. 6s.

Bourne's Examples of Modern Steam, Air, and Gas Engines of the most Approved Types, as employed for Pumping, for Driving Machinery, for Locomotion, and for Agriculture, minutely and, practically described. In course of publication, to be completed in Twenty-four Parts, price 2s. 6d. each, forming One Volume, with about 50 Plates and 400 Woodcuts.

A Treatise on the Screw Propeller, Screw Vessels, and Screw Engines, as adapted for purposes of Peace and War. By JOHN BOURNE, C.E. Third Edition, with 54 Plates and 287 Woodcuts. Quarto, price 63s.

Handbook of the Steam Engine. By JOHN BOURNE, C.E. forming a KEY to the Author's Catechism of the Steam Engine. With 67 Woodcuts. Fcp. 9s.

A History of the Machine-
Wrought Hosiery and Lace Manufactures.
By WILLIAM FELKIN, F.L.S. F.S.S. With
several Illustrations. Royal 8vo. 21s.

Mitchell's Manual of Practical
Assaying. Third Edition for the most part
re-written, with all the recent Discoveries
incorporated. By W. CROOKES, F.R.S.
With 188 Woodcuts. 8vo. 28s.

Reimann's Handbook of Aniline
and its Derivatives; a Treatise on the
Manufacture of Aniline and Aniline Colours.
Revised and edited by WILLIAM CROOKES,
F.R.S. 8vo. with 5 Woodcuts, 10s. 6d.

On the Manufacture of Beet-
Root Sugar in England and Ireland. By
WILLIAM CROOKES, F.R.S. With 11 Wood-
cuts. 8vo. 8s. 6d.

Practical Treatise on Metallurgy,
adapted from the last German Edition of
Professor KERL's *Metallurgy* by W.
CROOKES, F.R.S. &c. and E. RÖHRIG,
Ph.D. M.E. 3 vols. 8vo. with 625 Wood-
cuts, price £4 19s.

The Art of Perfumery ; the History
and Theory of Odours, and the Methods of
Extracting the Aromas of Plants. By Dr.
PIESSE, F.C.S. Third Edition, with 53
Woodcuts. Crown 8vo. 10s. 6d.

Chemical, Natural, and Physical Magic,
for Juveniles during the Holidays. By the
same Author. With 38 Woodcuts. Fcp. 6s.

Loudon's Encyclopædia of Agri-
culture: comprising the Laying-out, Im-
provement, and Management of Landed
Property, and the Cultivation and Economy
of the Productions of Agriculture. With
1,100 Woodcuts. 8vo. 21s.

Loudon's Encyclopædia of Gardening :
comprising the Theory and Practice of
Horticulture, Floriculture, Arboriculture,
and Landscape Gardening. With 1,000
Woodcuts. 8vo. 21s.

Bayldon's Art of Valuing Rents
and Tillages, and Claims of Tenants upon
Quitting Farms, both at Michaelmas and
Lady-Day. Eighth Edition, revised by
J. C. MORTON. 8vo. 10s. 6d.

Religious and Moral Works.

Old Testament Synonyms, their
Bearing on Christian Faith and Practice.
By the Rev. R. B. GIRDLESTONE, M.A. 8vo.
[*Nearly ready.*]

Fundamentals; or, Bases of Belief
concerning Man and God: a Handbook of
Mental, Moral, and Religious Philosophy.
By the Rev. T. GRIFFITH, M.A. 8vo.
price 10s. 6d.

An Introduction to the Theology
of the Church of England, in an Exposition
of the Thirty-nine Articles. By the Rev.
T. P. BOULTBEE, M.A. Fcp. 8vo. price 6s.

The Student's Compendium of
the Book of Common Prayer; being Notes
Historical and Explanatory of the Liturgy
of the Church of England. By the Rev. H.
ALLDEN NASH. Fcp. 8vo. price 2s. 6d.

Prayers Selected from the Col-
lection of the late Baron Bunsen, and
Translated by CATHERINE WINKWORTH.
PART I. For the Family. PART II. Prayers
and Meditations for Private Use. Fcp.
8vo. price 3s. 6d.

Churches and their Creeds. By
the Rev. Sir PHILIP PERRING, Bart. late
Scholar of Trin. Coll. Cambridge, and
University Medallist. Crown 8vo. 10s. 6d.

The Bible and Popular Theology ;
a Re-statement of Truths and Principles,
with special reference to recent works of
Dr. Liddon, Lord Hatherley, and the Right
Hon. W. E. Gladstone. By G. VANCE
SMITH, B.A. Ph.D. 8vo. 7s. 6d.

The Truth of the Bible ; Evidence
from the Mosaic and other Records of
Creation; the Origin and Antiquity of
Man; the Science of Scripture; and from
the Archæology of Different Nations of the
Earth. By the Rev. B. W. SAVILE, M.A.
Crown 8vo. 7s. 6d.

Considerations on the Revision
of the English New Testament. By C. J.
ELLCOTT, D.D. Lord Bishop of Gloucester
and Bristol. Post 8vo. price 7s. 6d.

An Exposition of the 39 Articles,
Historical and Doctrinal. By E. HAROLD
BROWNE, D.D. Lord Bishop of Ely. Ninth
Edition. 8vo. 16s.

Examination-Questions on Bishop
Browne's Exposition of the Articles. By
the Rev. J. GORLE, M.A. Fcp. 3s. 6d.

The Voyage and Shipwreck of
St. Paul; with Dissertations on the Ships
and Navigation of the Ancients. By JAMES
SMITH, F.R.S. Crown 8vo. Charts, 10s. 6d.

The Life and Epistles of St. Paul. By the Rev. W. J. CONYBEARE, M.A. and the Very Rev. J. S. HOWSON, D.D. Dean of Chester. Three Editions :—

LIBRARY EDITION, with all the Original Illustrations, Maps, Landscapes on Steel, Woodcuts, &c. 2 vols. 4to. 48s.

INTERMEDIATE EDITION, with a Selection of Maps, Plates, and Woodcuts. 2 vols. square crown 8vo. 31s. 6d.

STUDENT'S EDITION, revised and condensed, with 46 Illustrations and Maps. 1 vol. crown 8vo. 9s.

Evidence of the Truth of the Christian Religion derived from the Literal Fulfilment of Prophecy. By ALEXANDER KEITH, D.D. 37th Edition, with numerous Plates, in square 8vo. 12s. 6d.; also the 39th Edition, in post 8vo. with 5 Plates, 6s.

The History and Destiny of the World and of the Church, according to Scripture. By the same Author. Square 8vo. with 40 Illustrations, 10s.

The History and Literature of the Israelites, according to the Old Testament and the Apocrypha. By C. DE ROTHSCHILD and A. DE ROTHSCHILD. Second Edition. 2 vols. crown 8vo. 12s. 6d.

VOL. I. *The Historical Books*, 7s. 6d.

VOL. II. *The Prophetic and Poetical Writings*, price 5s.

Ewald's History of Israel to the Death of Moses. Translated from the German. Edited, with a Preface and an Appendix, by RUSSELL MARTINEAU, M.A. Second Edition. 2 vols. 8vo. 24s.

The See of Rome in the Middle Ages. By the Rev. OSWALD J. REICHEL, B.C.L. and M.A. 8vo. 18s.

The Pontificate of Pius the Ninth; being the Third Edition, enlarged and continued, of 'Rome and its Ruler.' By J. F. MAGUIRE, M.P. Post 8vo. Portrait, price 12s. 6d.

Ignatius Loyola and the Early Jesuits. By STEWART ROSE. New Edition, revised. 8vo. with Portrait, 16s.

An Introduction to the Study of the New Testament, Critical, Exegetical, and Theological. By the Rev. S. DAVIDSON, D.D. LL.D. 2 vols. 8vo. 30s.

A Critical and Grammatical Commentary on St. Paul's Epistles. By C. J. ELLICOTT, D.D. Lord Bishop of Gloucester and Bristol. 8vo.

Galatians, Fourth Edition, 8s. 6d.

Ephesians, Fourth Edition, 8s. 6d.

Pastoral Epistles, Fourth Edition, 10s. 6d.

Philippians, Colossians, and Philemon, Third Edition, 10s. 6d.

Thessalonians, Third Edition, 7s. 6d.

Historical Lectures on the Life of Our Lord Jesus Christ: being the Hulsean Lectures for 1859. By C. J. ELLICOTT, D.D. Lord Bishop of Gloucester and Bristol. Fifth Edition. 8vo. 12s.

The Greek Testament; with Notes, Grammatical and Exegetical. By the Rev. W. WEBSTER, M.A. and the Rev. W. F. WILKINSON, M.A. 2 vols. 8vo. £2 4s.

Horne's Introduction to the Critical Study and Knowledge of the Holy Scriptures. Twelfth Edition; with 4 Maps and 22 Woodcuts. 4 vols. 8vo. 42s.

Compendious Introduction to the Study of the Bible. Edited by the Rev. JOHN AYRE, M.A. With Maps, &c. Post 8vo. 6s.

The Treasury of Bible Knowledge; being a Dictionary of the Books, Persons, Places, Events, and other Matters of which mention is made in Holy Scripture. By Rev. J. AYRE, M.A. With Maps, 15 Plates, and numerous Woodcuts. Fcp. 8vo. 6s.

Every-day Scripture Difficulties explained and illustrated. By J. E. PRESCOTT, M.A. I. *Matthew* and *Mark*; II. *Luke* and *John*. 2 vols. 8vo. price 9s. each.

The Pentateuch and Book of Joshua Critically Examined. By the Right Rev. J. W. COLENSO, D.D. Lord Bishop of Natal. Crown 8vo. price 6s.

The Four Cardinal Virtues; Six Sermons for the Day, in relation to the Public and Private Life of Catholics. By the Rev. ORBY SHIPLEY, M.A. Crown 8vo. with Frontispiece, 7s. 6d.

The Formation of Christendom. By T. W. ALLIES. PARTS I. and II. 8vo. price 12s. each.

Four Discourses of Chrysostom, chiefly on the parable of the Rich Man and Lazarus. Translated by F. ALLEN, B.A. Crown 8vo. 3s. 6d.

Christendom's Divisions; a Philosophical Sketch of the Divisions of the Christian Family in East and West. By EDMUND S. FFOLKES. Post 8vo. 7s. 6d. PART II. *Greeks and Latins*, price 15s.

Thoughts for the Age. By ELIZABETH M. SEWELL, Author of 'Amy Herbert.' New Edition. Fcp. 8vo. price 5s.

Passing Thoughts on Religion. By the same Author. Fcp. 5s.

Self-examination before Confirmation. By the same Author. 32mo. 1s. 6d.

Thoughts for the Holy Week, for Young Persons. By the same Author. New Edition. Fcp. 8vo. 2s.

Readings for a Month Preparatory to Confirmation from Writers of the Early and English Church. By the same. Fcp. 4s.

Readings for Every Day in Lent, compiled from the Writings of Bishop JEREMY TAYLOR. By the same Author. Fcp. 5s.

Preparation for the Holy Communion; the Devotions chiefly from the works of JEREMY TAYLOR. By the same. 32mo. 3s.

Principles of Education drawn from Nature and Revelation, and Applied to Female Education in the Upper Classes. By the same Author. 2 vols. fcp. 12s. 6d.

Bishop Jeremy Taylor's Entire Works; with Life by BISHOP HEBER. Revised and corrected by the Rev. C. P. EDEN. 10 vols. £5 5s.

England and Christendom. By ARCHBISHOP MANNING, D.D. Post 8vo. price 10s. 6d.

Singers and Songs of the Church: being Biographical Sketches of the Hymn-Writers in all the principal Collections; with Notes on their Psalms and Hymns. By JOSIAH MILLER, M.A. Post 8vo. 10s. 6d.

'Spiritual Songs' for the Sundays and Holidays throughout the Year. By J. S. B. MONSELL, LL.D. Vicar of Egham and Rural Dean. Fourth Edition, Sixth Thousand. Fcp. price 4s. 6d.

The Beatitudes. By the same Author. Third Edition, revised. Fcp. 3s. 6d.

His Presence not his Memory, 1855. By the same Author, in memory of his Son. Sixth Edition. 16mo. 1s.

Lyra Germanica, translated from the German by Miss C. WINKWORTH. FIRST SERIES, the *Christian Year*, Hymns for the Sundays and Chief Festivals of the Church; SECOND SERIES, the *Christian Life*. Fcp. 8vo. price 3s. 6d. each SERIES.

Lyra Eucharistica; Hymns and Verses on the Holy Communion, Ancient and Modern: with other Poems. Edited by the Rev. ORBY SHIPLEY, M.A. Second Edition. Fcp. 5s.

Shipley's Lyra Messianica. Fcp. 5s.

Shipley's Lyra Mystica. Fcp. 5s.

Endeavours after the Christian Life: Discourses. By JAMES MARTINEAU. Fourth Edition. Post 8vo. price 7s. 6d.

Invocation of Saints and Angels; for the use of Members of the English Church. Edited by the Rev. ORBY SHIPLEY, M.A. 24mo. 3s. 6d.

Travels, Voyages, &c.

How to See Norway. By Captain J. R. CAMPBELL. With Map and 5 Woodcuts. Fcp. 8vo. price 5s.

Pau and the Pyrenees. By Count HENRY RUSSELL, Member of the Alpine Club. With 2 Maps. Fcp. 8vo. price 5s.

Scenes in the Sunny South; Including the Atlas Mountains and the Oases of the Sahara in Algeria. By Lieut.-Col. the Hon. C. S. VEREKER, M.A. Commandant of the Limerick Artillery Militia. 2 vols. post 8vo. price 21s.

Hours of Exercise in the Alps. By JOHN TYNDALL, LL.D., F.R.S. Second Edition, with Seven Woodcuts by E. Whymper. Crown 8vo. price 12s. 6d.

The Playground of Europe. By LESLIE STEPHEN, late President of the Alpine Club. With 4 Illustrations on Wood by E. Whymper. Crown 8vo. 10s. 6d.

Westward by Rail: the New Route to the East. By W. F. RAE. Second Edition, enlarged. Post 8vo. with Map, price 10s. 6d.

Travels in the Central Caucasus and Bashan, including Visits to Ararat and Tabreez and Ascents of Kazbek and Elbruz. By DOUGLAS W. FRESHFIELD. Square crown 8vo. with Maps, &c., 18s.

Cadore or Titian's Country. By JOSIAH GILBERT, one of the Authors of the 'Dolomite Mountains.' With Map, Facsimile, and 40 Illustrations. Imp. 8vo. 31s. 6d.

Zigzagging amongst Dolomites ; with more than 300 Illustrations by the Author. By the Author of 'How we Spent the Summer.' Oblong 4to. price 15s.

The Dolomite Mountains. Excursions through Tyrol, Carinthia, Carniola, and Friuli. By J. GILBERT and G. C. CHURCHILL, F.R.G.S. With numerous Illustrations. Square crown 8vo. 21s.

How we Spent the Summer ; or, a Voyage en Zigzag in Switzerland and Tyrol with some Members of the ALPINE CLUB. Third Edition, re-drawn. In oblong 4to. with about 300 Illustrations, 15s.

Pictures in Tyrol and Elsewhere. From a Family Sketch-Book. By the same Author. Second Edition. 4to. with many Illustrations, 21s.

Beaten Tracks ; or, Pen and Pencil Sketches in Italy. By the same Author. With 42 Plates of Sketches. 8vo. 16s.

The Alpine Club Map of the Chain of Mont Blanc, from an actual Survey in 1863—1864. By A. ADAMS-REILLY, F.R.G.S. M.A.C. In Chromolithography on extra stout drawing paper 28in. x 17in. price 10s. or mounted on canvas in a folding case, 12s. 6d.

History of Discovery in our Australasian Colonies, Australia, Tasmania, and New Zealand, from the Earliest Date to the Present Day. By WILLIAM HOWITT. 2 vols. 8vo. with 3 Maps, 20s.

The Capital of the Tycoon ; a Narrative of a 3 Years' Residence in Japan. By Sir RUTHERFORD ALCOCK, K.C.B. 2 vols. 8vo. with numerous Illustrations, 42s.

Pilgrimages in the Pyrenees and Landes. By DENYS SHYNE LAWLOR. Crown 8vo. with Frontispiece and Vignette, price 15s.

Guide to the Pyrenees, for the use of Mountaineers. By CHARLES PACKE. Second Edition, with Maps, &c. and Appendix. Crown 8vo. 7s. 6d.

The Alpine Guide. By JOHN BALL, M.R.I.A. late President of the Alpine Club. Post 8vo. with Maps and other Illustrations.

Guide to the Eastern Alps, price 10s. 6d.

Guide to the Western Alps, including Mont Blanc, Monte Rosa, Zermatt, &c. price 6s. 6d.

Guide to the Central Alps, including all the Oberland District, price 7s. 6d.

Introduction on Alpine Travelling in general, and on the Geology of the Alps, price 1s. Either of the Three Volumes or Parts of the *Alpine Guide* may be had with this INTRODUCTION prefixed, price 1s. extra.

The Northern Heights of London ; or, Historical Associations of Hampstead, Highgate, Muswell Hill, Hornsey, and Islington. By WILLIAM HOWITT. With about 40 Woodcuts. Square crown 8vo. 21s.

The Rural Life of England. By the same Author. With Woodcuts by Bewick and Williams. Medium 8vo. 12s. 6d.

Visits to Remarkable Places : Old Halls, Battle-Fields, and Scenes illustrative of striking Passages in English History and Poetry. By the same Author. 2 vols. square crown 8vo. with Wood Engravings, 25s.

Works of Fiction.

Novels and Tales. By the Right Hon. B. DISRAELI. Cabinet Editions, complete in Ten Volumes, crown 8vo. price 6s. each, as follows :—

LOTHAIR, 6s.
CONINGSEY, 6s.
SYBIL, 6s.
TANCRED, 6s.

VENETIA, 6s.
ALROY, IXION, &c. 6s.
YOUNG DUKE, &c. 6s.
VIVIAN GREY, 6s.

CONTARINI FLEMING, &c. 6s.
HENRIETTA TEMPLE, 6s.

A Visit to my Discontented Cousin. Reprinted, with some Additions, from *Fraser's Magazine*. Crown 8vo. price 7s. 6d.

Stories and Tales. By E. M. SEWELL. Comprising *Amy Herbert ; Gertrude ; the Earl's Daughter ; the Experience of Life ; Cleve Hall ; Ivors ; Katharine Ashton ; Margaret Percival ; Laneton Parsonage ;* and *Ursula*. The Ten Works complete in Eight Volumes, crown 8vo. bound in leather and contained in a Box, price Two GUINEAS.

Our Children's Story. By One of their Gossips. By the Author of 'Voyage en Zigzag,' &c. Small 4to. with Sixty Illustrations by the Author, price 10s. 6d.

Cabinet Edition, in crown 8vo. of Stories and Tales by Miss SEWELL:—

AMY HERBERT, 2s. 6d.	KATHARINE ASHTON, 3s. 6d.
GERTRUDE, 2s. 6d.	MARGARET PERCIVAL, 5s.
EARL'S DAUGHTER, 2s. 6d.	LANETON PARSONAGE, 4s. 6d.
EXPERIENCE OF LIFE, 2s. 6d.	URSULA, 4s. 6d.
CLEVE HALL, 3s. 6d.	
IVORS, 3s. 6d.	

A Glimpse of the World. Fcp. 7s. 6d.

Journal of a Home Life. Post 8vo. 9s. 6d.

After Life; a Sequel to the 'Journal of a Home Life.' Post 8vo. 10s. 6d.

The Modern Novelist's Library.

Each Work, in crown 8vo. complete in a Single Volume:—

MELVILLE'S GLADIATORS, 2s. boards; 2s. 6d. cloth.

GOOD FOR NOTHING, 2s. boards; 2s. 6d. cloth.

HOLMBY HOUSE, 2s. boards; 2s. 6d. cloth.

INTERPRETER, 2s. boards; 2s. 6d. cloth.

KATE COVENTRY, 2s. boards; 2s. 6d. cloth.

QUEEN'S MARIES, 2s. boards; 2s. 6d. cloth.

TROLLOPE'S WARDEN, 1s. 6d. boards; 2s. cloth.

BARCHESTER TOWERS, 2s. boards; 2s. 6d. cloth.

BRAMLEY-MOORE'S SIX SISTERS OF THE VALLEYS, 2s. boards; 2s. 6d. cloth.

Ierne; a Tale. By W. STEUART TRENCH, Author of 'Realities of Irish Life.' Second Edition. 2 vols. post 8vo. price 21s.

The Giant; a Witch's Story for English Boys. Edited by Miss SEWELL, Author of 'Amy Herbert,' &c. Fcp. 8vo. price 5s.

Uncle Peter's Fairy Tale for the XIXth Century. By the same Author and Editor. Fcp. 8vo. 7s. 6d.

The Home at Heatherbrae; a Tale. By the Author of 'Everley.' Fcp. 8vo. price 5s.

Becker's Gallus; or, Roman Scenes of the Time of Augustus. Post 8vo. 7s. 6d.

Becker's Charicles: Illustrative of Private Life of the Ancient Greeks. Post 8vo. 7s. 6d.

Tales of Ancient Greece. By GEORGE W. COX, M.A. late Scholar of Trin. Coll. Oxford. Crown 8vo. price 6s. 6d.

Cabinet Edition of Novels and Tales by G. J. WHYTE MELVILLE:—

THE GLADIATORS, 5s.	HOLMBY HOUSE, 5s.
DIGBY GRAND, 5s.	GOOD FOR NOTHING, 6s.
KATE COVENTRY, 5s.	QUEEN'S MARIES, 6s.
GENERAL BOUNCE, 5s.	THE INTERPRETER, 5s.

Wonderful Stories from Norway, Sweden, and Iceland. Adapted and arranged by JULIA GODDARD. With an Introductory Essay by the Rev. G. W. COX, M.A. and Six Illustrations. Square post 8vo. 6s.

Poetry and The Drama.

Thomas Moore's Poetical Works, the only Editions containing the Author's last Copyright Additions:—

Shamrock Edition, price 3s. 6d.

Ruby Edition, with Portrait, 6s.

Cabinet Edition, 10 vols. fcp. 8vo. 35s.

People's Edition, Portrait, &c. 10s. 6d.

Library Edition, Portrait & Vignette, 14s.

Moore's Lalla Rookh, Tenniel's Edition, with 68 Wood Engravings from Original Drawings and other Illustrations. Fcp. 4to. 21s.

Moore's Irish Melodies, Maclise's Edition, with 161 Steel Plates from Original Drawings. Super-royal 8vo. 31s. 6d.

Miniature Edition of Moore's Irish Melodies, with Maclise's Illustrations (as above), reduced in Lithography. Imp. 16mo. 10s. 6d.

Southey's Poetical Works, with the Author's last Corrections and copyright Additions. Library Edition. Medium 8vo. with Portrait and Vignette, 14s.

Lays of Ancient Rome; with *Ivory* and the *Armada*. By the Right Hon. LORD MACAULAY. 16mo. 4s. 6d.

Lord Macaulay's Lays of Ancient Rome. With 90 Illustrations on Wood, Original and from the Antique, from Drawings by G. SCHARF. Fcp. 4to. 21s.

Miniature Edition of Lord Macaulay's Lays of Ancient Rome, with Scharf's Illustrations (as above) reduced in Lithography. Imp. 16mo. 10s. 6d.

Goldsmith's Poetical Works, Illustrated with Wood Engravings from Designs by Members of the ETCHING CLUB. Imp. 16mo. 7s. 6d.

John Jerningham's Journal. Fcp. 8vo. price 3s. 6d.

The Mad War Planet, and other Poems. By WILLIAM HOWITT, Author of 'Visits to Remarkable Places,' &c. Fcp. 8vo. price 5s.

Eucharis; a Poem. By F. REGINALD STATHAM (Francis Reynolds), Author of 'Alice Rushton, and other Poems' and 'Glaphyra, and other Poems.' Fcp. 8vo. price 3s. 6d.

Poems of Bygone Years. Edited by the Author of 'Amy Herbert.' Fcp. 8vo. 5s.

Poems. By JEAN INGELOW. Fifteenth Edition. Fcp. 8vo. 5s.

Poems by Jean Ingelow. With nearly 100 Illustrations by Eminent Artists, engraved on Wood by DALZIEL Brothers. Fcp. 4to. 21s.

Mopsa the Fairy. By JEAN INGELOW. With Eight Illustrations engraved on Wood. Fcp. 8vo. 6s.

A Story of Doom, and other Poems. By JEAN INGELOW. Third Edition. Fcp. price 5s.

Bowdler's Family Shakspeare; cheaper Genuine Edition, complete in 1 vol. large type, with 36 Woodcut Illustrations, price 14s. or in 6 pocket vols. 3s. 6d. each.

Arundines Cami. Collegit atque edidit H. DRURY, M.A. Editio Sexta, curavit H. J. HODGSON, M.A. Crown 8vo. price 7s. 6d.

Horatii Opera, Pocket Edition, with carefully corrected Text, Marginal References, and Introduction. Edited by the Rev. J. E. YONGE, M.A. Square 18mo. 4s. 6d.

Horatii Opera, Library Edition, with Copious English Notes, Marginal References and Various Readings. Edited by the Rev. J. E. YONGE, M.A. 8vo. 21s.

The Æneid of Virgil Translated into English Verse. By JOHN CONINGTON, M.A. Corpus Professor of Latin in the University of Oxford. New Edition. Crown 8vo. 9s.

Hunting Songs and Miscellaneous Verses. By R. E. EGERTON WARBURTON. Second Edition. Fcp. 8vo. 5s.

Works by Edward Yardley:—

FANTASTIC STORIES, fcp. 3s. 6d.

MELUSINE and other POEMS, fcp. 5s.

HORACE'S ODES translated into ENGLISH VERSE, crown 8vo. 6s.

SUPPLEMENTARY STORIES and POEMS, fcp. 3s. 6d.

Rural Sports, &c.

Encyclopædia of Rural Sports; a Complete Account, Historical, Practical, and Descriptive, of Hunting, Shooting, Fishing, Racing, &c. By D. P. BLAINE. With above 600 Woodcuts (20 from Designs by JOHN LEECH). 8vo. 21s.

The Dead Shot, or Sportsman's Complete Guide; a Treatise on the Use of the Gun, Dog-breaking, Pigeon-shooting, &c. By MARKSMAN. Fcp. with Plates, 5s.

A Book on Angling: being a Complete Treatise on the Art of Angling in every branch, including full Illustrated Lists of Salmon Flies. By FRANCIS FRANCIS. Second Edition, with Portrait and 15 other Plates, plain and coloured. Post 8vo. 15s.

Wilcocks's Sea-Fisherman: comprising the Chief Methods of Hook and Line Fishing in the British and other Seas, a glance at Nets, and remarks on Boats and Boating. Second Edition, enlarged, with 80 Woodcuts. Post 8vo. 12s. 6d.

The Fly-Fisher's Entomology. By ALFRED RONALDS. With coloured Representations of the Natural and Artificial Insect. Sixth Edition, with 20 coloured Plates. 8vo. 14s.

The Book of the Roach. By GREVILLE FENNELL, of 'The Field.' Fcp. 8vo. price 2s. 6d.

Blaine's Veterinary Art: a Treatise on the Anatomy, Physiology, and Curative Treatment of the Diseases of the Horse, Neat Cattle, and Sheep. Seventh Edition, revised and enlarged by C. STEEL. 8vo. with Plates and Woodcuts, 18s.

Horses and Stables. By Colonel F. FITZWYGRAM, XV. the King's Hussars. With 24 Plates of Woodcut Illustrations, containing very numerous Figures. 8vo. 15s.

Youatt on the Horse. Revised and enlarged by W. WATSON, M.R.C.V.S. 8vo. with numerous Woodcuts, 12s. 6d.

Youatt on the Dog. (By the same Author.) 8vo. with numerous Woodcuts, 6s.

The Dog in Health and Disease
By STONEHENGE. With 70 Wood Engravings. New Edition. Square crown 8vo. 10s. 6d.

The Greyhound. By the same Author. Revised Edition, with 24 Portraits of Greyhounds. Square crown 8vo. 10s. 6d.

Robbins's Cavalry Catechism; or, Instructions on Cavalry Exercise and Field Movements, Brigade Movements, Out-post Duty, Cavalry supporting Artillery, Artillery attached to Cavalry. 12mo. price 5s.

The Horse's Foot, and how to keep it Sound. By W. MILES, Esq. Ninth Edition, with Illustrations. Imp. 8vo. 12s. 6d.

A Plain Treatise on Horse-shoeing. By the same Author. Sixth Edition, post 8vo. with Illustrations, 2s. 6d.

Stables and Stable Fittings. By the same. Imp. 8vo. with 13 Plates, 15s.

Remarks on Horses' Teeth, addressed to Purchasers. By the same. Post 8vo. 1s. 6d.

The Ox, his Diseases and their Treatment; with an Essay on Parturition in the Cow. By J. R. DOBSON, M.R.C.V.S. Crown 8vo. with Illustrations, 7s. 6d.

Works of Utility and General Information.

The Law of Nations Considered as Independent Political Communities. By Sir TRAVERS TWISS, D.C.L. 2 vols. 8vo. 30s. or separately, PART I. *Peace*, 12s. PART II. *War*, 18s.

The Theory and Practice of Banking. By HENRY DUNNING MACLEOD, M.A. Barrister-at-Law. Second Edition. entirely remodelled. 2 vols. 8vo. 30s.

M'Culloch's Dictionary, Practical, Theoretical, and Historical, of Commerce and Commercial Navigation. New Edition, revised throughout and corrected to the Present Time; with a Biographical Notice of the Author. Edited by H. G. REID, Secretary to Mr. M'Culloch for many years. 8vo. price 63s. cloth.

Modern Cookery for Private Families, reduced to a System of Easy Practice in a Series of carefully-tested Receipts. By ELIZA ACTON. Newly revised and enlarged; with 8 Plates, Figures, and 150 Woodcuts. Fcp. 6s.

A Practical Treatise on Brewing; with Formulæ for Public Brewers, and Instructions for Private Families. By W. BLACK. Fifth Edition. 8vo. 10s. 6d.

The Cabinet Lawyer; a Popular Digest of the Laws of England, Civil, Criminal, and Constitutional. Twenty-third Edition, corrected and brought up to the Present Date. Fcp. 8vo. price 7s. 6d.

Maunder's Treasury of Knowledge and Library of Reference: comprising an English Dictionary and Grammar, Universal Gazetteer, Classical Dictionary, Chronology, Law Dictionary, Synopsis of the Peerage, Useful Tables, &c. Fcp. 6s.

Chess Openings. By F. W. LONGMAN, Balliol College, Oxford. Fcp. 8vo. 2s. 6d.

Hints to Mothers on the Management of their Health during the Period of Pregnancy and in the Lying-in Room. By THOMAS BULL, M.D. Fcp. 5s.

The Maternal Management of Children in Health and Disease. By THOMAS BULL, M.D. Fcp. 5s.

How to Nurse Sick Children; containing Directions which may be found of service to all who have charge of the Young. By CHARLES WEST, M.D. Second Edition. Fcp. 8vo. 1s. 6d.

Notes on Lying-In Institutions; with a Proposal for Organising an Institution for Training Midwives and Midwifery Nurses. By FLORENCE NIGHTINGALE. With several Illustrations. 8vo. price 7s. 6d.

Notes on Hospitals. By FLORENCE NIGHTINGALE. Third Edition, enlarged; with 13 Plans. Post 4to. 18s.

Tidd Pratt's Law relating to Benefit Building Societies; with Practical Observations on the Act and all the Cases decided thereon, also a Form of Rules and Forms of Mortgages. Fcp. 3s. 6d.

Collieries and Colliers: a Handbook of the Law and Leading Cases relating thereto. By J. C. FOWLER, Barrister. Second Edition. Fcp. 8vo. 7s. 6d.

Coulthart's Decimal Interest Tables at Twenty-four Different Rates not exceeding Five per Cent. Calculated for the use of Bankers. To which are added Commission Tables at One-eighth and One-fourth per Cent. 8vo. 15s.

Willich's Popular Tables for Ascertaining the Value of Lifehold, Leasehold, and Church Property, Renewal Fines, &c.; the Public Funds; Annual Average Price and Interest on Consols from 1731 to 1867; Chemical, Geographical, Astronomical, Trigonometrical Tables, &c. Post 8vo. 10s.

Pewtner's Comprehensive Specifier; a Guide to the Practical Specification of every kind of Building-Artificer's Work: with Forms of Building Conditions and Agreements, an Appendix, Foot-Notes, and Index. Edited by W. YOUNG. Architect. Crown 8vo. 6s.

Periodical Publications.

The Edinburgh Review, or Critical Journal, published Quarterly in January, April, July, and October. 8vo. price 6s. each Number.

Notes on Books: An Analysis of the Works published during each Quarter by Messrs. LONGMANS & Co. The object is to enable Bookbuyers to obtain such information regarding the various works as is usually afforded by tables of contents and explanatory prefaces. 4to. Quarterly. *Gratis*.

Fraser's Magazine. Edited by JAMES ANTHONY FROUDE, M.A. New Series published on the 1st of each Month. 8vo. price 2s. 6d. each Number.

The Alpine Journal; A Record of Mountain Adventure and Scientific Observation. By Members of the Alpine Club. Edited by LESLIE STEPHEN. Published Quarterly, May 31, Aug. 31, Nov. 30, Feb. 28. 8vo. price 1s. 6d. each Number.

Knowledge for the Young.

The Stepping Stone to Knowledge: Containing upwards of Seven Hundred Questions and Answers on Miscellaneous Subjects, adapted to the capacity of Infant Minds. By a MOTHER. New Edition, enlarged and improved. 18mo. price 1s.

The Stepping Stone to Geography: Containing several Hundred Questions and Answers on Geographical Subjects. 18mo. 1s.

The Stepping Stone to English History: Containing several Hundred Questions and Answers on the History of England. 1s.

The Stepping Stone to Bible Knowledge: Containing several Hundred Questions and Answers on the Old and New Testaments. 18mo. 1s.

The Stepping Stone to Biography: Containing several Hundred Questions and Answers on the Lives of Eminent Men and Women. 18mo. 1s.

Second Series of the Stepping Stone to Knowledge: containing upwards of Eight Hundred Questions and Answers on Miscellaneous Subjects not contained in the FIRST SERIES. 18mo. 1s.

The Stepping Stone to French Pronunciation and Conversation: Containing several Hundred Questions and Answers. By Mr. P. SADLER. 18mo. 1s.

The Stepping Stone to English Grammar: Containing several Hundred Questions and Answers on English Grammar. By Mr. P. SADLER. 18mo. 1s.

The Stepping Stone to Natural History: VERTEBRATE or BACKBONED ANIMALS. PART I. *Mammalia*; PART II. *Birds, Reptiles, Fishes*. 18mo. 1s. each Part.

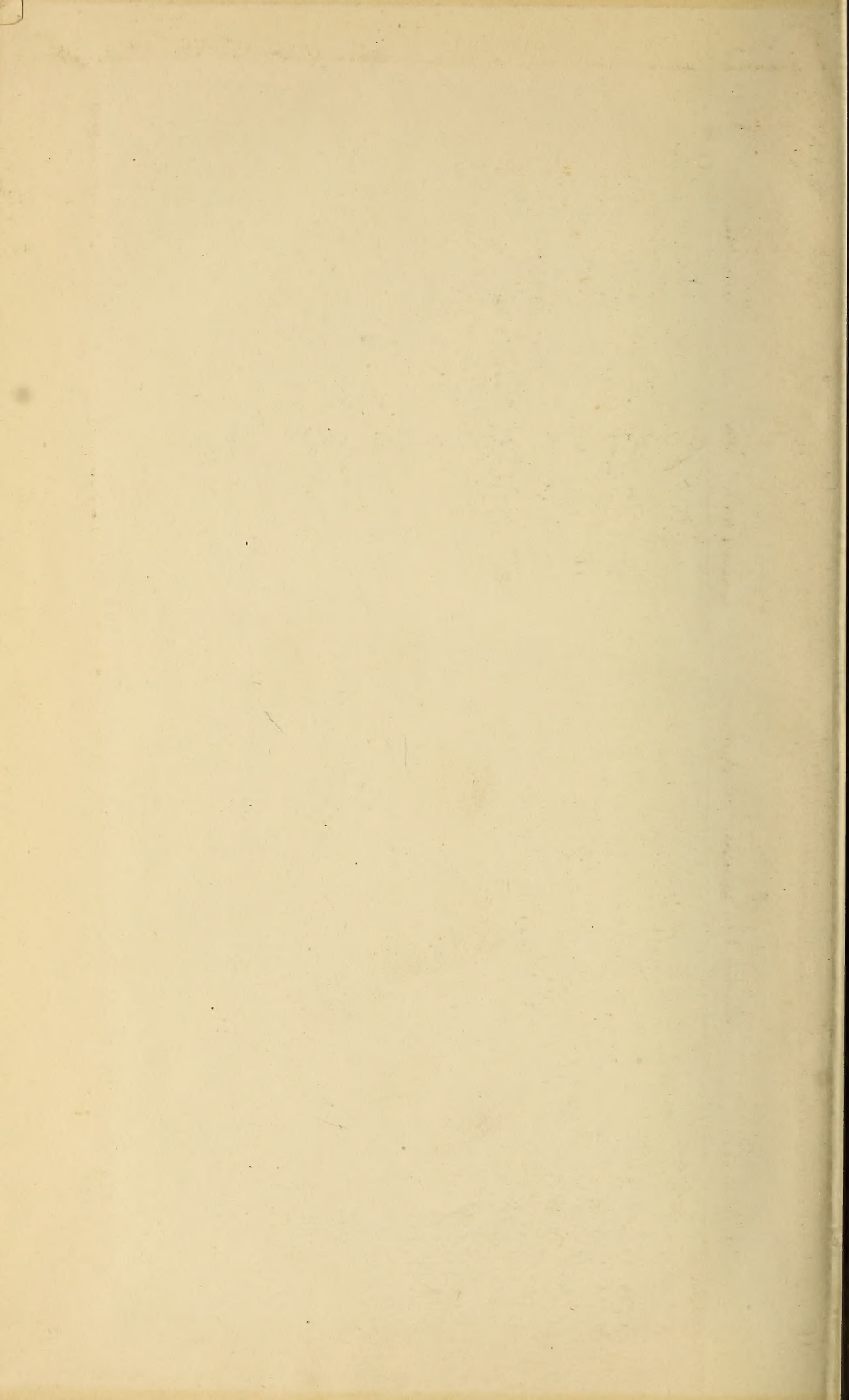
INDEX.

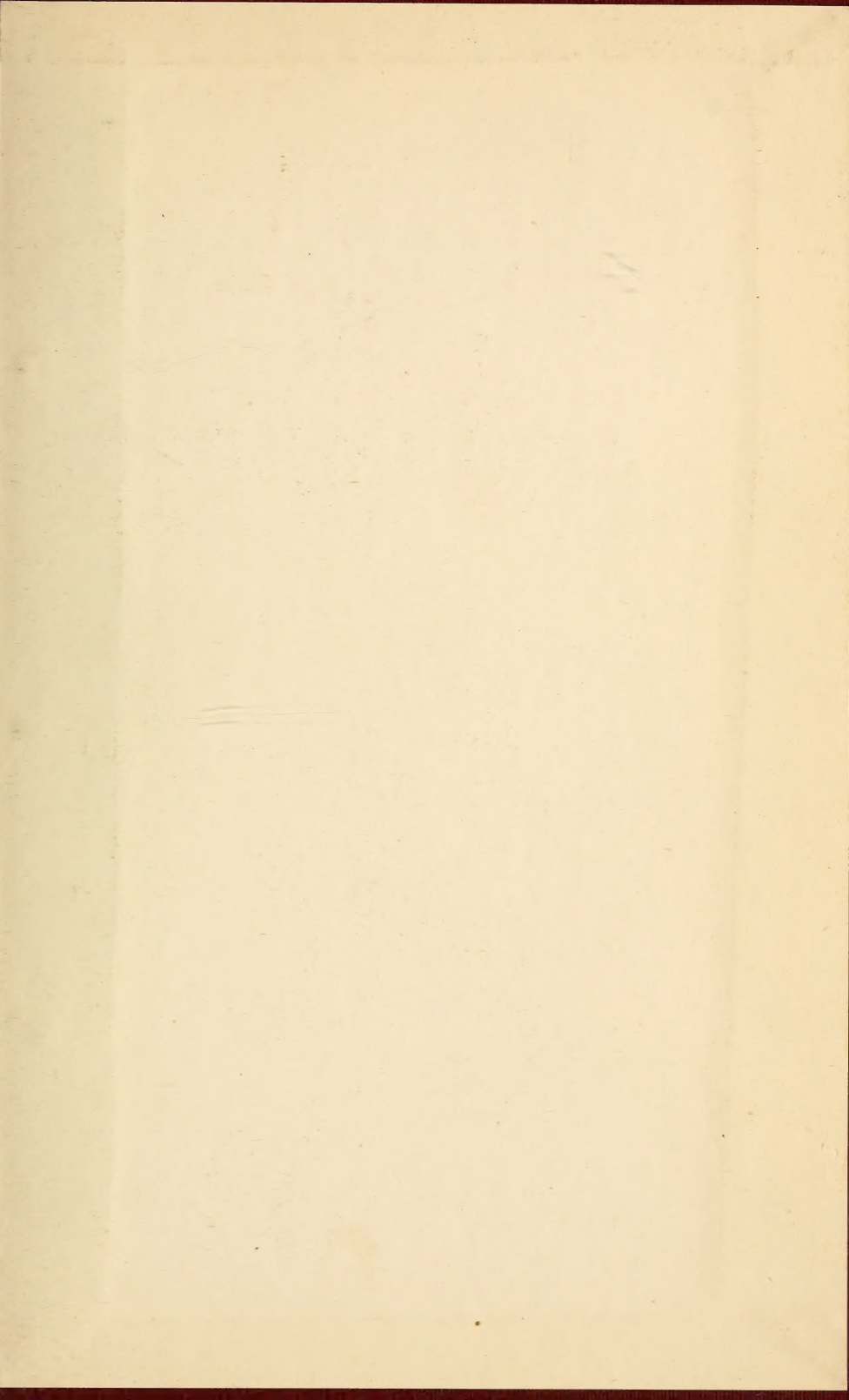
ACTON's Modern Cookery.....	19	Cabinet Lawyer.....	19
ALCOCK's Residence in Japan.....	16	CAMPBELL's Norway.....	15
ALLIES on Formation of Christendom.....	14	CARNOTA's Memoirs of Pombal.....	3
ALLEN's Discourses of Chrysostom.....	14	CATES's Biographical Dictionary.....	4
Alpine Guide (The).....	16	CATS and FARLIE's Moral Emblems.....	11
—— Journal.....	20	Changed Aspects of Unchanged Truths....	6
ALTHAUS on Medical Electricity.....	10	CHESNEY's Indian Polity.....	2
ARNOLD's Manual of English Literature ..	5	—— Waterloo Campaign.....	2
ARNOIT's Elements of Physics.....	8	CHESNEY's and REEVE's Military Essays ..	2
Arundines Cami.....	18	Chorale Book for England.....	11
Autumn Holidays of a Country Parson....	6	CLOUGH's Lives from Plutarch.....	2
ATRE's Treasury of Bible Knowledge.....	14	COLENSO (Bishop) on Pentateuch and Book of Joshua.....	14
		Commonplace Philosopher in Town and Country.....	6
BACON's Essays by WHEATELY.....	5	CONINGTON's Translation of Virgil's <i>Æneid</i>	18
—— Life and Letters, by SPEDDING ..	4	CONTANSEAU's Two French Dictionaries ..	6
—— Works.....	5	CONYBEARE and HOWSON's Life and Epistles of St. Paul.....	14
BAIN's Mental and Moral Science.....	7	COOPER's Surgical Dictionary.....	10
—— on the Senses and Intellect.....	7	COPLAND's Dictionary of Practical Medicine.....	11
BALL's Guide to the Central Alps.....	16	COULTHART's Decimal Interest Tables	19
—— Guide to the Western Alps.....	16	Counsel and Comfort from a City Pulpit ..	6
—— Guide to the Eastern Alps.....	16	Cox's (G. W.) Aryan Mythology.....	3
BAYLDON's Rents and Tillages.....	13	—— Tale of the Great Persian War.....	2
Beaten Tracks.....	16	—— Tales of Ancient Greece.....	17
BECKER's <i>Charicles</i> and <i>Gallus</i>	17	CRESY's Encyclopædia of Civil Engineering.....	12
BENFEY's Sanskrit-English Dictionary....	6	Critical Essays of a Country Parson.....	6
BERNARD on British Neutrality.....	1	CROOKES on Beet-Root Sugar.....	13
BLACK's Treatise on Brewing.....	19	——'s Chemical Analysis.....	9
BLACKLEY's German-English Dictionary ..	6	CUTLEY's Handbook of Telegraphy.....	12
BLAINE's Rural Sports.....	18	CUSACK's Student's History of Ireland....	2
—— Veterinary Art.....	18		
BOOTH's Saint-Simon.....	3	D'AUBIGNÉ's History of the Reformation in the time of CALVIN.....	2
BOULTBEE on 39 Articles.....	13	DAVIDSON's Introduction to New Testament.....	14
BOURNE on Screw Propeller.....	12	Dead Shot (The), by MARKSMAN.....	18
——'s Catechism of the Steam Engine..	12	DE LA RIVE's Treatise on Electricity.....	8
—— Examples of Modern Engines.....	12	DENISON's Vice-Regal Life.....	1
—— Handbook of Steam Engine.....	12	DE TOCQUEVILLE's Democracy in America ..	2
—— Treatise on the Steam Engine.....	12	DISRAELI's Lothair.....	16
—— Improvements in the same.....	12	—— Novels and Tales.....	16
BOWDLER's Family SHAKESPEARE.....	18	DOBSON on the Ox.....	19
BOYD's Reminiscences.....	3	DOVE's Law of Storms.....	8
BRAMLEY-MOORE's Six Sisters of the Valley.....	17	DOYLE's Fairyland.....	11
BRANDE's Dictionary of Science, Literature, and Art.....	9	DYER's City of Rome.....	2
BRAY's (C.) Education of the Feelings	7		
—— Philosophy of Necessity.....	7	EASTLAKE's Gothic Revival.....	12
—— On Force.....	7	—— Hints on Household Taste.....	12
BROWNE's Exposition of the 39 Articles....	13	—— History of Oil Painting.....	11
BRUNEL's Life of BRUNEL.....	3	—— Life of Gibson.....	11
BUCKLE's History of Civilisation.....	1	Edinburgh Review.....	20
BULL's Hints to Mothers.....	19	Elements of Botany.....	9
—— Maternal Management of Children..	19		
BUNSEN's God in History.....	3		
—— Prayers.....	13		
BURKE's Vicissitudes of Families.....	4		
BURTON's Christian Church.....	3		

ELLICOTT on the Revision of the English New Testament	13	HOWITT's Australian Discovery	16
—'s Commentary on Ephesians	14	— Mad War Planet	18
— Lectures on Life of Christ	14	— Northern Heights of London	16
— Commentary on Galatians	14	— Rural Life of England	16
— Pastoral Epist.	14	— Visits to Remarkable Places	16
— Philippians, &c.	14	HÜBNER's Pope Sixtus	4
— Thessalonians	14	HUGHES's Manual of Geography	8
EWALD's History of Israel	14	HUME's Essays	7
		— Treatise on Human Nature	7
FAIRBAIRN's Application of Cast and Wrought Iron to Building	12	IHNE's History of Rome	
— Information for Engineers	12	INGELOW's Poems	18
— Treatise on Mills and Millwork ..	12	— Story of Doom	18
— Iron Shipbuilding	12	— Mopsa	18
FARADAY's Life and Letters	4	JAMESON's Legends of Saints and Martyrs ..	11
FARRAR's Chapters on Language	5	— Legends of the Madonna	11
— Families of Speech	7	— Legends of the Monastic Orders ..	11
FELKIN on Hosiery & Lace Manufactures ..	13	— Legends of the Saviour	11
FENNEL's Book of the Roach	18	JOHN JERNINGHAM's Journal	18
FFOULKES's Christendom's Divisions	15	JOHNSTON's Geographical Dictionary	7
FITZWYGRAM on Horses and Stables	18		
FOWLER's Collieries and Colliers	19	KALISCH's Commentary on the Bible	5
FRANCIS's Fishing Book	18	— Hebrew Grammar	5
FRASER's Magazine	20	KEITH on Destiny of the World	14
FRESHFIELD's Travels in the Caucasus	15	— Fulfilment of Prophecy	14
FROUDE's History of England	1	KERL's Metallurgy, by CROOKES and RÖHRIG	13
— Short Studies	6	KIRBY and SPENCE's Entomology	9
GANOT's Elementary Physics	8		
GIANT (The)	17	LATHAM's English Dictionary	5
GILBERT's Cadore	15	LAWLOR's Pilgrimages in the Pyrenees	16
— and CHURCHILL's Dolomites	16	LECKY's History of European Morals	3
GIRDLESTONE's Bible Synonyms	13	— Rationalism	3
GIRTIN's House I Live In	10	Leisure Hours in Town	6
GLEDSTONE's Life of WHITEFIELD	3	Lessons of Middle Age	6
GODDARD's Wonderful Stories	17	LEWES's Biographical History of Philosophy ..	3
GOLDSMITH's Poems, Illustrated	17	LIDDELL and SCOTT's Greek-English Lexicon ..	6
GRAHAM's View of Literature and Art	2	— Abridged ditto	6
GRANT's Ethics of Aristotle	5	Life of Man Symbolised	11
— Home Politics	2	LINDLEY and MOORE's Treasury of Botany ..	9
Graver Thoughts of a Country Parson	6	LONGMAN's Edward the Third	1
Gray's Anatomy	10	— Lectures on History of England ..	1
GREENHOW on Bronchitis	10	— Chess Openings	19
GRIFFITH's Fundamentals	13	LOUDON's Encyclopædia of Agriculture	13
GROVE on Correlation of Physical Forces ..	9	— Gardening	13
GURNEY's Chapters of French History	2	— Plants	9
GWILT's Encyclopædia of Architecture	12	LOWNDES's Engineer's Handbook	12
		LUBBOCK's Origin of Civilisation	9
HAMPDEN's (Bishop) Memorials	3	Lyra Eucharistica	15
Hare on Election of Representatives	5	— Germanica	11, 15
HARTWIG's Harmonies of Nature	9	— Messianica	15
— Polar World	9	— Mystica	15
— Sea and its Living Wonders	9		
— Subterranean World	9	MACAULAY's (Lord) Essays	3
— Tropical World	9	— History of England	1
HAUGHTON's Manual of Geology	8	— Lays of Ancient Rome	17
HERSCHEL's Outlines of Astronomy	7	— Miscellaneous Writings	6
HEWITT on the Diseases of Women	10	— Speeches	5
HODGSON's Time and Space	7	— Works	1
— Theory of Practice	7	MACFARREN's Lectures on Harmony	11
HOLMES's Surgical Treatment of Children ..	10	MACLEOD's Elements of Political Economy ..	4
— System of Surgery	10	— Dictionary of Political Economy ..	4
Home (The) at Heatherbrae	17	— Theory and Practice of Banking ..	19
HORNE's Introduction to the Scriptures ..	14	McCULLOCH's Dictionary of Commerce	19
— Compendium of the Scriptures ..	14		
How we Spent the Summer	16		

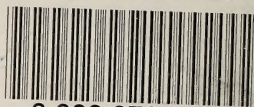
MAGUIRE's Life of Father Mathew	4	NIGHTINGALE's Notes on Hospitals	19
———— Pius IX.....	14	———— Lying-In Institu-	
MALET's Overthrow of the Germanic Con-		———— tions	19
federation	2	NILSSON's Scandinavia	9
MANNING's England and Christendom	15	NORTHCOTT on Lathes and Turning	12
MARCEZ on the Larynx	10	Notes on Books.....	20
MARSHALL's Canadian Dominion.....	7		
———— Physiology	11	ODLING's Animal Chemistry	10
MARSHMAN's History of India	2	———— Course of Practical Chemistry ..	9
———— Life of Havelock	4	———— Manual of Chemistry.....	9
MARTINEAU's Endeavours after the Chris-		———— Lectures on Carbon	10
tian Life	15	———— Outlines of Chemistry	10
MASSINGBERD's History of the Reformation	3	O'DRISCOLL's Memoir of MacIise	3
MAUNDER's Biographical Treasury	4	O'FLANAGAN's Irish Chancellors	4
———— Geographical Treasury	8	Our Children's Story	16
———— Historical Treasury	3	OWEN's Comparative Anatomy and Physio-	
———— Scientific and Literary Treasury	9	logy of Vertebrate Animals	8
———— Treasury of Knowledge.....	19	———— Lectures on the Invertebrata.....	8
———— Treasury of Natural History ..	9		
MAT's Constitutional History of England..	1	PACKE's Guide to the Pyrenees	16
MELVILLE's Digby Grand.....	17	PAGET's Lectures on Surgical Pathology ..	10
———— General Bounce	17	PEREIRA's Manual of Materia Medica.....	11
———— Gladiators	17	PERRIN's Italian and Tuscan Sculptors ..	11
———— Good for Nothing	17	PERRING's Churches and Creeds	13
———— Holmby House.....	17	PEWTERER's Comprehensive Specifier	20
———— Interpreter	17	Pictures in Tyrol	16
———— Kate Coventry.....	17	PIESSE's Art of Perfumery	13
———— Queen's Maries	17	———— Chemical, Natural, and Physical Magic	13
MENDELSSOHN's Letters	4	PONTON's Beginning	8
MERIVALE's Fall of the Roman Republic ..	2	PRATT's Law of Building Societies	19
———— Romans under the Empire ..	2	PRENDERGAST's Mastery of Languages	6
MERRIFIELD and EVERS's Navigation	7	PRESCOTT's Scripture Difficulties.....	14
MILES on Horse's Foot and Horse Shoeing.	19	Present-Day Thoughts, by A. K. H. B.	6
———— on Horses' Teeth and Stables	19	PROCTOR's Plurality of Worlds	7
MILL (J.) on the Mind	4	———— Saturn	
MILL (J. S.) on Liberty	4	———— Scientific Essays	8
———— Subjection of Women	4	———— Sun	7
———— on Representative Government	4	Public Schools Atlas	8
———— on Utilitarianism	4		
————'s Dissertations and Discussions.....	4	RAE's Westward by Rail	15
———— Political Economy	4	Recreations of a Country Parson	6
———— System of Logic.....	5	REICHER's See of Rome.....	14
———— Hamilton's Philosophy	4	REILLY's Map of Mont Blanc.....	16
———— Inaugural Address at St. Andrew's.	4	REIMANN on Aniline Dyes	13
MILLER's Elements of Chemistry	9	RIVERS's Rose Amateur's Guide	9
———— Hymn Writers	15	ROBINS's Cavalry Catechism.....	19
MITCHELL's Manual of Architecture	12	ROGERS's Correspondence of Greyson	6
———— Manual of Assaying	13	———— Eclipse of Faith	6
MONSELL's Beatitudes	15	———— Defence of Faith	6
———— His Presence not his Memory ..	15	ROGET's Thesaurus of English Words and	
———— 'Spiritual Songs'	15	Phrases	5
MOORE's Irish Melodies.....	17	RONALD's Fly-Fisher's Entomology	18
———— Lalla Rookh	17	ROSE's Loyola	14
———— Poetical Works.....	17	ROTHSCHILD's Israelites	14
MORELL's Elements of Psychology	7	ROWTON's Debater	5
MORELL's Mental Philosophy	7	RUSSELL's Pau and the Pyrenees.....	15
MÜLLER's (Max) Chips from a German			
Workshop	7	SANDARS's Justinian's Institutes	5
———— Lectures on the Science of Lan-		SAVILE on Truth of the Bible.....	13
guage.....	5	SCOTT's Lectures on the Fine Arts	11
———— (K. O.) Literature of Ancient		———— Albert Durer	11
Greece	2	SEEBOHM's Oxford Reformers of 1498	2
MURCHISON on Liver Complaints	10	SEWELL's After Life	17
MURE's Language and Literature of Greece	2	———— Glimpse of the World	17
		———— History of the Early Church	3
NASH's Compendium of the Prayer-Book ..	13	———— Journal of a Home Life	17
New Testament Illustrated with Wood En-			
gravings from the Old Masters	11		
NEWMAN's History of his Religious Opinions	4		

SEWELL'S Passing Thoughts on Religion ..	15	TYNDALL'S Lectures on Light	
— Poems of Bygone Years	18	— Lectures on Sound	
— Preparation for Communion	15	— Heat a Mode of Motion	
— Principles of Education	15		
— Readings for Confirmation	15	UEBERWEG'S System of Logic	
— Readings for Lent	15	Uncle PETER'S Fairy Tale	13
— Examination for Confirmation ..	15	URE'S Dictionary of Arts, Manufactures, and	
— Stories and Tales	16 & 17	Mines	12
— Thoughts for the Age	15		
— Thoughts for the Holy Week	15		
SHIPLEY'S Four Cardinal Virtues	14		
— Invocation of Saints	15	VAN DER HOEVEN'S Handbook of Zoology ..	
SHORT'S Church History	3	VEREKER'S Sunny South	15
SMART'S WALKER'S English Dictionaries ..	5	Visit to my Discontented Cousin	16
SMITH'S (V.) Bible and Popular Theology ..	13		
— Paul's Voyage and Shipwreck	13		
— (SYDNEY) Life and Letters	3	WARBURTON'S Hunting Songs	18
— Miscellaneous Works ..	6	WATSON'S Principles and Practice of Physic	10
— Wit and Wisdom	6	WATTS'S Dictionary of Chemistry	9
SOUTHEY'S Doctor	5	WEBB'S Objects for Common Telescopes ...	7
— Poetical Works	17	WEBSTER & WILKINSON'S Greek Testament	14
STANLEY'S History of British Birds	9	WELLINGTON'S Life, by GLEIG	4
STATHAM'S Eucharis	18	WEST on Children's Diseases	10
STEBBING'S Analysis of MILL'S Logic	5	— on Children's Nervous Disorders ..	10
STEPHEN'S Ecclesiastical Biography	4	— on Nursing Sick Children	19
— Playground of Europe	15	WHATELY'S English Synonymes	5
Stepping-Stone to Knowledge, &c.	20	— Logic	5
STIRLING'S Secret of Hegel	7	— Rhetoric	5
— Sir WILLIAM HAMILTON	7	WHITE and RIDDLE'S Latin Dictionaries ..	5
STONEHENGE on the Dog	19	WILCOCKS'S Sea Fisherman	18
— on the Greyhound	19	WILLIAMS'S Aristotle's Ethics	5
STRICKLAND'S Queens of England	4	WILLIAMS on Climate of South of France ..	10
Sunday Afternoons at the Parish Church of		— Consumption	10
a Scottish University City	6	WILLICH'S Popular Tables	20
		WILLIS'S Principles of Mechanism	12
		WINSLOW on Light	8
TAYLOR'S History of India	2	WOOD'S (J. G.) Bible Animals	9
— (Jeremy) Works, edited by EDEN ..	15	— Homes without Hands	9
THIRLWALL'S History of Greece	2	— Insects at Home	8
THOMSON'S Conspectus	11	— Strange Dwellings	8
— Laws of Thought	5	— (T.) Chemical Notes	16
TODD (A.) on Parliamentary Government ..	1	WOODWARD and CATES'S Encyclopædia ..	2
— and BOWMAN'S Anatomy and Phy-			
siology of Man	10	YARDLEY'S Poetical Works	18
TRENCH'S Ierne	17	YONGE'S History of England	1
— Realities of Irish Life	2	— English-Greek Lexicons	
TROLLOPE'S Barchester Towers	17	— Two Editions of Horace	18
— Warden	17	YOUATT on the Dog	18
TWISS'S Law of Nations	19	— on the Horse	
TYNDALL'S Diamagnetism	8		
— Faraday as a Discoverer	4	ZELLER'S Socrates	
— Fragments of Science	8	— Stoics, Epicureans, and Sceptics ..	
— Hours of Exercise in the Alps ..	15	Zigzagging amongst Dolomites	
— Lectures on Electricity	8		





LIBRARY OF CONGRESS



0 003 076 510 2